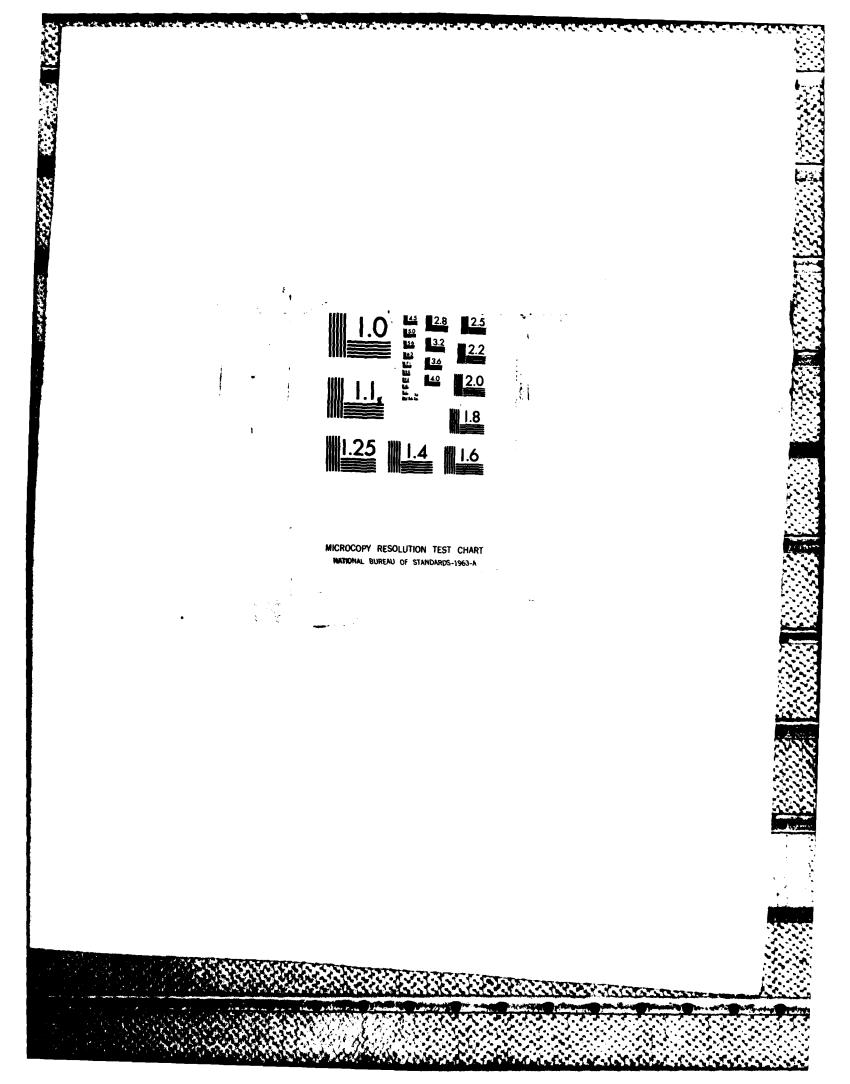
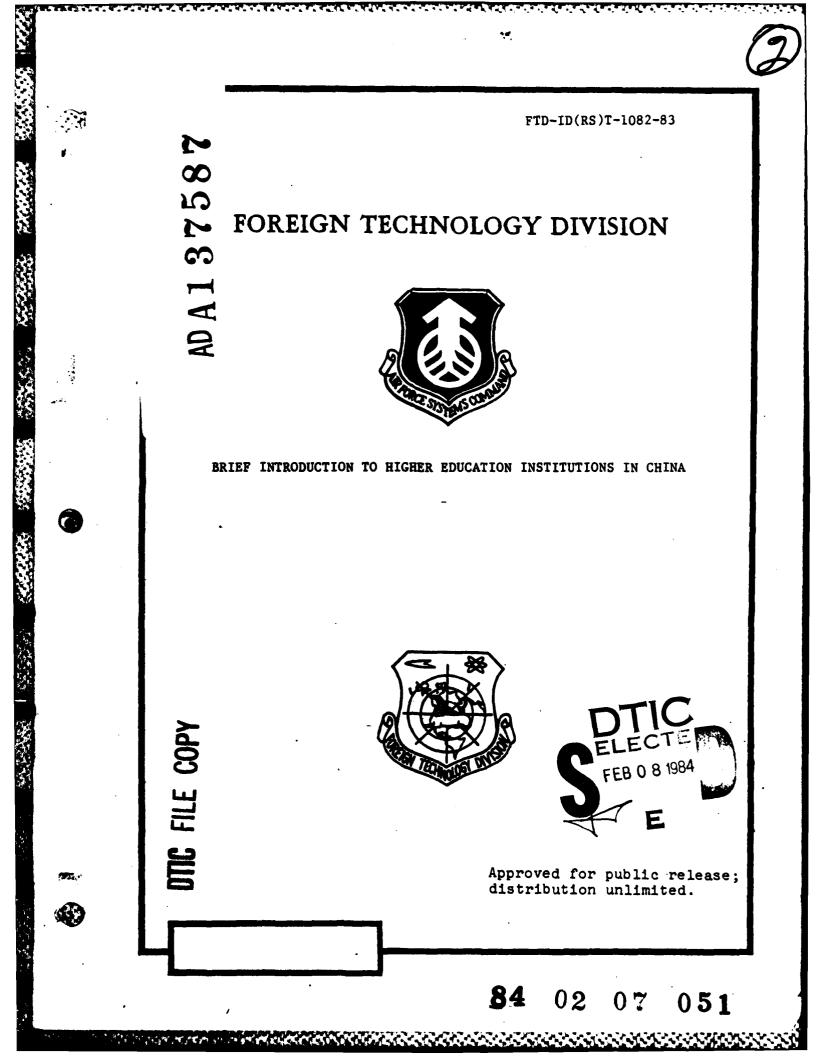
AD-A137 587		BRI CHI	BRIEF INTRODUCTION TO HIGHER EDUCATION INSTITUTIONS IN 1/9 CHINA(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH 12 JAN 84 FTD-IDCR5)T-1082-83								9		
UNCLASS	IFIED	12	JAN 84	FIV	IU(RS)	1-1002	-82			F/G 5	i79 ·	NL	
		8											F.
			4.										
	243 2			E)		1				70		8.	
				<b>U</b> -	شيقا				5				
			6- سو										
		NG:					т.—				AU'		
													ĥ
	1												





**FTD-**ID(RS)T-1082-83

# EDITED TRANSLATION

FTD9ID(RS)T-1082-83

 $\mathbf{i}$ 

12 January 1984

MICROFICHE NR: FTD-84-C-000032

BRIEF INTRODUCTION TO HIGHER EDUCATION INSTITUTIONS IN CHINA

English pages: 828

Brief Introduction to Chinese Institutes of Source: Higher Education, Education Science Press, Beiging, China, 1982, pp. 1-12; 14-22; 23-26; 28-30; 31-34; 36-40; 42-44; 50-51; 54-56; 57-60; 64-81; 84; 87-88; 106-108; 112-114; 120-121; 131-134; 137-140; 141-143; 146-148; 152-153; 172-174; 176-177; 179-180; 199-203; 204-206; 209-210; 224-232; 234-237; 242-243; 250-251; 254-256; 258-259; 269-276; 277-278; 280-282; 287-289; 292-293; 313-317; 337-343; 357-362; 373-374; 378-379; 386-389; 390-392; 418-419; 437-442; 445-449; 451-453; 456-458; 473-478; 493-499; 500-502; 506-508; 522-524; 538-548; 555-557; 559-561; 566-569; 586-587; 593-594; 607-609; 612-613; 626-636; 642-543; 645-646; 651-652; 660-661; 675-676; 678-679; 690; plus 4 unnumbered pages. Country of origin: China Translated by: SCITRAN £33657-81-D-0263 Requester: FTD/TQTA Approved for public release; distribution unlimited.

THIS TRANSLATION IS A RENDITION OF THE ORIGI-NAL FOREIGN TEXT WITHOUT ANY ANALYTICAL OR EDITORIAL COMMENT. STATEMENTS OR THEORIES ADVOCATED OR IMPLIED ARE THOSE OF THE SOURCE AND DO NOT NECESSARILY REFLECT THE POSITION OR OPINION OF THE FOREIGN TECHNOLOGY DI-VISION.

#### PREPARED BY:

TRANSLATION DIVISION FOREIGN TECHNOLOGY DIVISION WP-AFB, OHIO.

FTD-ID(RS)T-1082-83

Date 12 Jan 1984

# TABLE OF CONTENTS

1.5.1.2.5.31.41

3

ALL THE REAL PROPERTY.

13

Explanation of the Editors 1
Beijing University 4
Chinese People's University 21
Qing Hua University 29
Northern Jiaotong University
Beijing Institute of Aeronautics and Astronautics
Beijing Polytech Institute 53
Beijing Steel Institute 59
Beijing Chemical Engineering Institute
Beijing Post and Telecommunications Institute
Beijing Institute of Agricultural Mechanization
Agricultural Construction and Environment Engineering Special Field 81
Beijing Agricultural University
Beijing Forestry Institute
Chinese Capital Medical College
Beijing Medical School
Beijing Institute of Traditional Chinese Medicine
Beijing Normal University 110
Beijing Foreign Language Institute 124
Beijing Foreign Trade Institute 130
International Relations Institute
Beijing Athletic Institute 136
Central Music Institute 142
Central Arts Institute 147
Central Institute of Nationality 153
City of Tienjin. Nankai University 158

τ.,

5

Tianjin University 167
Huabei Huabei Electric Power Institute 180
The Province of Shanxi. Shanxi University 185
Shanxi Agriculture University 192
The Inner Mongolia Autonomous Region. Inner Mongolia University 198
The Province of Liaoning. Liaoning University
Dalian Engineering Institute 210
Shenyang Politech Institute 217
Northeast Engineering Institute 220
Fuxin Mining Institute 230
Dalian Ocean Shipping Institute 234
Shenyang Agricultural Institute 241
Jilin Province. Jilin University 248
Jilin Polytech University 257
Changchun Geological Institute 263
The Province of Heilongjiang. Heilongjiang University
Harbin Polytech University 273
Harbin Science and Technology University
Northeast Heavy Machinery Institute 284
Harbin Ship Engineering Institute 288
Da Qing Petroleum Institute 293
City of Shanghai. Fudan University 297
Tongji University
Shanghai Jisotong University
Shanghai Science and Technology University
Ruadong Chemical Engineering Institute
Huedong Textile Engineering Institute

2111

Ś

1

A CARLES AND A CARLES A

Shanghai First Medical School
Huadong Normal University
Shanghai Foreign Language Institute
The Province of Jiangsu. Nanjing University
Nanjing Aeronautical Institute
Huadong Engineering Institute
China Mining Institute
Huadong Water Conservancy Institute 401
Zhenjiang Agricultural Machinery Institute
Nanjing Meteorology Institute 411
Nanjing Agriculture Institute 414
Zhejiang Province. Hangzhou University 419
Zhejiang University
The Province of Anhui. Anhui University
Anhui Labor University
China Science and Technology University
Hefai Polytech University 449
The Province of Fujian. Xiamen University
Oversea Chinese University 468
Fushou University
Jiang Xi Province. Jiang Xi University,
Jiang Xi Agricultural University
Shan Dong Province. Shan Dong University
The Shan Dong Oceanographic Institute 494
Dong Province. Hua Dong Petroleum Institute
He Nan Province. Zheng Zhou University 506
Hu Bei Province. Wu Han University
Hus Zhong Industrial Institute

3) (j)

1. S. W. -

and the state of the state state and

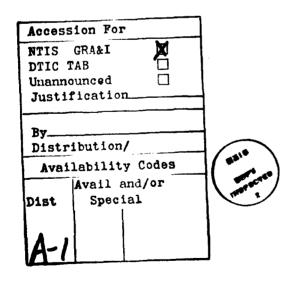
Received

No. of Street and Street		
F M		
	Wu Han Geology Institute	535
	Wu Han Water Conservancy and Electric Power Institute	541
	Wu Han Construction Materials Industrial Institute	549
1 E R T	Wu Han Surveying and Cartographic Institute	554
	Hua Zhong Agricultural Institute	559
	Hu Nan Province. Xiang Tan University	569
ň.	Ji Shou University	573
	Hu Nan University	577
	Zhong Nan Mining and Metallurgical Institute	585
	Guang Dong Province. Zhong Shan University	592
	Ji Nan University	604
	Hua Nan Industrial Institute	613
	Department of Chemistry	618
	Hua Nan Agricultural Institute	621
	Zhong Shan Medical Institute	630
	Guang Xi Shuang Autonomous Region. Guang Xi University	638
	Philosophy Specialty	645
	Si Chuan Province. Si Chuan University	648
	Chong Qing University	659
	Department of Basic Sciences	663
	The Cheng Du College of Science and Technology	667

Wu Han Water Conservancy and Electric Power Institute	541
Wu Han Construction Materials Industrial Institute	549
Wu Han Surveying and Cartographic Institute	554
Hua Zhong Agricultural Institute	559
Hu Nan Province. Xiang Tan University	569
Ji Shou University	573
Hu Nan University	577
Zhong Nan Mining and Metallurgical Institute	585
Guang Dong Province. Zhong Shan University	592
Ji Nan University	604
Hua Nan Industrial Institute	613
Department of Chemistry	618
Hua Nan Agricultural Institute	621
Zhong Shan Medical Institute	630
Guang Xi Shuang Autonomous Region. Guang Xi University	638
Philosophy Specialty	645
Si Chuan Province. Si Chuan University	648
Chong Qing University	659
Department of Basic Sciences	663
The Cheng Du College of Science and Technology	667
Xi Nan Traffic and Transportation University	676
The Cheng Du Telecommunications Engineering Institute	689
Chong Qing Construction Engineering Institute	695
Department of Foundational Studies	698
Xi Nan Agricultural Institute	702
Si Chuan Medical Institute	711
Xi Wan Institute of Political Science and Law	723

:: : : : :

Gui Zhou Province. Gui Zhou University
Department of Chemistry
Yun Nan Province. Yun Nan University
Yun Nan Institute of Forestry
Shan Xi Province. Xi Bei University
Xi An Traffic and Transportation University
Xi Bei Industrial Institute 774
Xi Bei Telecommunications Engineering Institute
Xi Bei Institute of LIght Industries 789
Xi Beí Agricultural Institute 794
Yan An University
Gan Su Province. Lan Zhou University 807
Ning Xia Hua Autonomous Region. Ning Xia University
Xin Jiang Uygur Autonomous Region. Xin Jiang University
Tai Wan Province



## GRAPHICS DISCLAIMER

vi.

r +1

:

1

·, ·

1

1.11 1111

6.14.2

All figures, graphics, tables, equations, etc. merged into this translation were extracted from the best quality copy available. BRIEF INTRODUCTION TO HIGHER EDUCATION INSTITUTIONS IN CHINA

/"A"

/1

Editing Committee on "Brief Introduction to Higher Education Institutions in China"

Chairman: Gao Yi Vice Chairmen: Huang Xinbai, Zhang Jian Members: Shang Zhi, Li Bangping, Ji Xiaogeng, Liu Yifan and Wu Wei.

Brief Introduction to Higher Education Institutions in China /"B"

Editing Committee on "Brief Introduction to Higher Education Institutions in China"

Educational Science Publishing Company, 1982, Beijing.

Explanation of the Editors (I)

A CASE ( NO POLY DAY)

After the founding of the new China, under the leadership of the Chinese Communist Party, the education policy of the Party has been executed thoroughly. Socialistic reforms have been made in higher education. It grew rapidly in quantity and the quality also improved somewhat. In comparison to the old China, great changes have taken place. In 1980, there were six hundred and seventy-five higher education institutions in the country. It increased by 2.3 times as compared with the high before the revolution (1947, same below). There were one million, one hundred and forty students in school. It increased by 13.6 times. In thirty-one years, the nation has educated three million, one hundred and seventy-eight thousand specially trained people. It is 17.1 times that in the twenty years before the revolution (1928 to 1949).

-1-

In the past thirty-one years, the development of higher education in our country has gone through a tortuous process.

The old China was a semi-feudal and semi-colonial state. The higher education was very backward. There was no independent higher education system. Missionary schools which received subsidies from the imperialists, and private schools occupied a large ratio. After the founding of People's Republic of China, the higher education institutions in the nation were first taken over by the country. The education rights were returned from the hands of the imperialists. The education management system used by the nationalist government was abolished. According to the principle of socialism, reforms were carried out in higher education step by step. A socialistic education system was gradually established. Immediately afterwards, adjustments in colleges and deaprtments took place. Based on the needs in the economical construction of the nation, the proportions in engineering, science and teaching have been increased.

From 1953 on, the first five year national economical development program was executed. The higher education gradually stepped on the track of proportional development according to a plan.

Within a two year period after 1958, under the guidance of . ideas of rushing into accomplishments, the development of the higher education was too fast so that the proportion was out of tune. The quality decreased.

In 1961, the policy of "regulating, reinforcing, fulfilling, and improving" was seriously carried out. Higher education was allowed to develop steadily. The quality of education was improved significantly.

The "Culture Revolution" began in 1966, which made the higher education suffer from destruction and serious loss never encountered before.

After the "Gang of Four" was crushed in 1976, especially since the t ird cr \_ral committee meeting of the eleventh congress of the Chinese Communist Party, the left-leaning errors made

-2-

 $\mathbf{N}$ 

#### (II)

before and during the "Culture Revolution" were "corrected." A series of policies for the intellectual was carried out. Higher education was gradually restored to a healthy track of stable development again.

and a large to be a large to be a large to be the second second second second second second second second second

### (III)

In order to reflect the tremendous accomplishments in higher education in our country during the past thirty years, under the active support of each higher education institution, we edited and published this volume of (("Brief Introduction to Higher Education Institutions in China")). It focuses on the development and changes for each higher education, the departments and disciplines, the scientific research achievements and laboratories, libraries, and publications. For the study of the development of higher education in our country, and for the collaboration and exchange between higher education institutions, between higher education institutions and scientific research units, as well as factories, industries, and mining units, a relatively systematic reference was provided. In the meantime, it provides reliable information on the outlook of our higher education institutions for all the people in our country.

This information in this book was based on the situation in October, 1980. All the changes occurring in the editing and publishing process have not been incorporated.

The statistical data, and charts and tables concerning the higher education development situation in our country were provided by the planning division of the Ministry of Education of People's Republic of China. The brief introductory material of each higher education institute was prepared by each institution. In our editing process, the proper deletions and language revisions were made. Due to our limited level, the readers should point out to us the improper points in the book.

City of Beijing



/2

## BEIJING UNIVERSITY

School Address: Loudou Bridge, Hai Dian District, Beijing. The predecessor of Beijing University is the Capital College. The Capital College was founded in 1898.

In 1862, the premier's office of the Qing Dynasty established the Capital Cultural Center (to choose 10 people from the children of the "Eight Banners" to learn English). Foreigners were hired as teachers to train foreign language translating talents . Thereafter, centers for French, Russian, German, and Eastern Language (Japanese) were set up one by one. In 1866, the Qing Government again decided to establish a mathematics center to study astronomical computations. From there on, the Cultural Center gradually increased various natural science courses. The number of students also increased to 120. The establishment of the Cultural Center is the beginning of modern schools in our country. It was the earliest public college for special training in our country. Later on, it emerged into the Capital College. It was the earliest part of the Capital College.

Beijing University Campus - Reading in the Morning by Wei Ming Lake



After the 1894 Sino-Japanese War, China was facing the danger of being divided by Imperialism. In order to save our country from extinguishing, Kang Youwei, Liang Qichao, Tan Sitong, and Yan Fu'initiated a capitalistic class reform movement to change the laws and to take new measures. They believed that to save China we had to learn from foreign countries and to realize those political reforms. However, to carry out the political reform, it was necessary to begin with abolishing the imperial examination system and to establish schools.

a na tanàna amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr'o amin'ny faritr

In June of 1896, Justice Minister Li Ruifen officially proposed to the Government for the first time to set up Capital College. In early 1898, Kang Youwei again proposed that: "establishing a college at the capital, middle schools in each province, and elementary and special schools in each county" in ((Overall Analysis of the Total Situation Upon Command by the Emperor)).

Under the promotion of Kang Youwei and Liang Quchao, the Emperor Guang Xu officially announced the political reform in the ((Imperial Edict for National Affairs)). It mentioned that "The Capital College should be an example for every province. Therefore, it should be built with priority." Therefore, Liang Qichao drafted the charters for the Capital College, in which the policy of the college was to "use Chinese culture as the main body and to apply the Western knowledge so that both Chinese and foreign methods could be used with mutual understanding." The curriculum of the college was divided into ordinary disciplines and special disciplines. The charter also specified that "all the schools in the provinces were under the control of the college." Emporer Guang Xu ordered Minister Sun Jiading to be the officer in charge of the affairs of the college to actively prepare for its opening.

In September, 1898, the diehards led by the Si Empress initiated a political group. Almost all the new policies were eliminated. However, the Capital College was preserved. After the coup, Xi Empress ordered the restoration of the imperial examination system in which talents were selected by writing an eight part

-5-

essay. In December of that year, the school officially started. The number of students was less than one hundred.

In 1900, the combined forces of eight countries occupied Beijing. The building of the Capital College was taken over. The books and equipment were destroyed. It was suspended for a while. After it was restored in 1902, Zhang Bai Xi was the superintendent to reorganize the school. The college had an accelerated and a preparative department. The accelerated discipline was divided into two programs, being officials and teaching. The preparative discipline was divided into politics and arts. The officer training and teacher training programs recruited 90 students combined. School opening ceremony was held on December 17. Before the revolution, Beijing University used this date as its anniversary.

In 1903, in order to oppose the apparent plan by the Tsar of Russia to invade the Northeast provinces of our country, the faculty and students opened up an anti-Russia Movement. This is the beginning of the student movement in the history of Beijing University. In the same year, the university added a medical college, a translation college, and an advanced scholar college. In the meantime, the University was divided into seven schools in scripture, law, literature, science, agriculture, engineering, and business. Each school had different departments. For example, the scripture school had three departments in Poems, Book of Rites in the Zhou's Dynasty, and the Spring and Autumn Annals. The literature school had Chinese literature and foreign literature departments. The Science school had geology and chemistry departments. With the exception of the three year business school, other schools were all four years. Until 1910, there were over 400 students in total in the University.

The Revolution of 1912 overthrew the Qing Dynasty. Capital College changed its name to Beijing University. Yan Fu was the President.

From 1912 to 1916, Beijing was under the control of warload Yuan Shikai. In 1916, Yan Shikai intended to become the emperor. The faculty and students at Beijing University were firmly opposed to /3

-6-

it. In order to demonstrate their protest, philosophy Professor Ma Xulun resigned his teaching position. He left his hat behind. Therefore, at that time he was called the "Hat-Off Professor". In that period, the students at Beijing University already increased to about 1600.

In January of 1917, the famous scholar, educator, and democratic revolutionary Cai Yuanpei was the President of Beijing University. He promoted the policy of "freedom of thoughts, combination of varieties" and reorganized and reformed Beijing University. He established the appraisal committee as the highest power organization in the University. Furthermore, he gradually adjusted Beijing University into three colleges of literature, science and law. Moreover, he abolished schools and altered departments. In 1919, Beijing Univeristy had 14 departments, i.e. mathematics department, physics department, chemistry department, geology department, philosophy department, Chinese literature department, history department, English literature department, French literature department, German literature department, Russian literature department, economics department, politics department, and law department. Then, it was the largest higher education institution in the country.

1212222222

NAMES OF TRANSPORT

Since September of 1915, the New Culture Movement was initiated all over the country. Chen Duxiu was one of the leaders of this movement. He began the ((New Youth)) Magazine, which opposed the restoration of old feudalism and encouraged democracy and science. After he became the Dean of the School of Literature at Beijing University, many Beijing University professors were editors of the ((New Youth)) Magazine. It became a center for the New Culture Movement.

In 1917, the October Revolution took place in Russia. Marxism was brought into China. At that time, the Chief of Library at Beijing University, Li Dazhao, acquired lots of books to promote the new culture and new ideology. Furthermore, under his leadership, a "group studying Marxism in Beijing University" was founded. Beijing University became an important place to learn, study and spread Marxism. In the fall of 1918, Mao Tse-tung came to Beijing University and worked in the library for half a year.

-7-

He utilized the resources of Beijing University fully to widely come in contact with various ideologies, to explore the truth in revolution, and to study Marxism. He was actively engaged in the activities of the philosophy group and the news study group. Furthermore, he was awarded a certificate by the news study group for completing a six month study period.

The great patriotic "May 4th Movement of 1919" was originally initiated at Beijing University. On May 4, 1919, Beijing University students gathered at Tian An Men in opposition to the invasion of imperialism and the surrender of the Northern Warlord Government. In that gathering, the declaration drafted by the student representative of Beijing University, Xu Teheng, was passed. The slogan of "fighting for sovereignty against the foreigners and eliminating traitors from within" was used. After the meeting, several thousand students held a demonstration and burnt down the residence of traitor Cao Rulin. 32 students were arrested on the spot; among them, there were 20 students from Beijing University. After the movement was initiated, the whole country responded. In a very short period of time, hundreds of thousands of people from all segments went on strike to form a revolutionary tide. "The May 4th Movement in 1919" significantly pushed forward the revolutionary struggle of the Chinese people and it has a significant historical meaning.

The famous Professor of Chinese Literature at Beijing University, a participant of the "May 4th" movement, an old Party member, comrade Yang Hui, was helping the students in the history of Chinese Literature.



-8-

Since the "May 4th" movement, Marxism was spreading widely in China. A group of intellectuals with the preliminary communism ideology began to emerge in Beijing University. For example, Deng Zhongxia, Huang Rikui, Gao Junyu, He Mengxiong, and Fan Hongji are exceptional representatives. Under the leadership of Li Dachao, they established the Beijing Communist Party group in October of 1920 and became the earliest communist party members in Beijing University.

Since the "May 4th" movement, due to the function of Beijing University in the democratic revolution movement, the University attracted a great deal of hostility from the reactionary influence. In July of 1927, the warlords from the northeastern region outrageously decided to abolish Beijing University. Nine national schools in Beijing were consolidated into the so-called Capital University. They forced the students to study old classical Chinese books and exercised feudal and dictatorial control, which drove most of the professors away. This was a big step backward. After the reign of the Nationalist Party was established, a university zone system was used without considering the requests of the students and faculty of Beijing University. The Capital University was renamed China University (later to Peiping University). This decision was vigorously opposed by the original students of Beijing University. They refused to be led by the authority and opened up a campaign to restore the University. In August of 1929, the name Beijing University was officially restored.

Since 1931, Jiang Menglin was the President. He presented the idea that "professors do research, staff members take care of affairs, the President manages the school, and the students study" and made several changes in the administrative and teaching systems in the University. He established a University Affairs Committee to replace the Appraisal Committee as the highest leading organization of the institution. The University had 3 colleges of literature, science, and law. The 3 departments of English, German, and French were combined in a single department of foreign languages. Department of biology (1925) and department of psychology (1926) were added so that there were 14 departments in total. The departmental chariman was chosen from the

-9-

professors in the department, instead of being elected by the committee on professors. A full-time professorship system was used and the credit system was adopted. In 1932, on the basis of post-graduate studies on Chinese literature at Beijing University, the graduate school was officially formed. However, at this time Jiang Menglin and his people practiced a high pressure policy. The democratic power was under attack and the academic freedom was being suppressed.

After the eruption of the War of Resistance against Japan, a part of the faculty and students moved south to form Changsha Temporary University in conjunction with Qinghua University and Nankai University. In April of 1938, it was moved from Changsha to Kunming and named National Southwestern Consolidated University. The original 3 Presidents formed a Normal Affairs Committee to administer the institution at Southwestern Consolidated University. The Univeristy had 5 colleges in total and 26 departments. They were colleges of literature, science, engineering, law and teaching. The various departments at Beijing University were merged with the relevant departments at Qinghua and Nankai Universities. They were absorbed into the 3 colleges of law, science, and literature of the Consolidated University. In addition, Beijing University retained an office to process its own business. In the summer of 1939, the graduate school of Beijing University began to recruit new students to resume its activities. It belonged to the Beijing University system and was not under the control of the Consolidated University. Southwestern Consolidated University continued the cultural and educational career under difficult circumstances and with poor equipment. The number of students was usually maintained at about 3000 each year.

With the victory of the War against Japan, Southwestern Consolidated University was terminated in May of 1946. Beijing University, Qinghua University, and Nankai University were resumed, respectively. In October of the same year, Beijing University was officially opened in Peiping. At the time, a portion of Peiping Temporary University was merged into Beijing University. In addition to the original 3 colleges of literature, science, and law (the original foreign language department was

-10-

divided into Western language department and Eastern language department, the original biology department was divided into departments of zoology and botany, the psychology department was terminated, for a total of 15 departments), there was a medical college (3 departments: medicine, dentistry, and pharmacology), an agricultural college (10 departments: agronomy, horticulture, agricultural chemistry, insectology, plant pathology, animal husbandry, forestry, veterinary medicine, pedological fertilization, and agricultural economy), and an engineering college (5 departments: mechanical engineering, electrical engineering, architectural engineering, chemical engineering, and civil engineering). Furthermore, under the Chinese literature department and the history departments, two special training programs in the library and museum were established, respectively. Upon restoration, books, instruments, and equipment were added. New courses were offered. The scale of the school was expanded. However, at that time, the institution was under the control of HuShi and his associates. The democratic request was suppressed and academic studies were interfered with. The faculty and students were living in an atmosphere without freedom.

In the history of the development of Beijing University, there has always been the tradition of democracy and progressiveness. The atmosphere of freedom in reading and independence in research was relatively thick and active. In the meantine, methodology to rigorously conduct the studies was developed. In each historical period, batch after batch of progressive people, scholars, professors, and scientists with good academic accomplishments emerged. A great number of patriotic teachers taught very seriously. Under the difficult conditions in the old China, activities in scientific studies were carried out. Certain accomplishments were attained in literature, history, and natural sciences. During his teaching career, Professor Li Siguany began to establish his famous geological mechanics and initiated studies on the various aspects of the Quarternary Period of glaciers in China. Great contributions were made to the development of geological science in our country. Others, such as Professors Li Dachao, Lu Xun, Qian Xuantong, Liu Bannong,

-11-

Shen Yimo, Chen Zixiu, Ma Yinchu, Ma Xulun, Weng Wenhao, A.M. Grabau, Gu Renguang, Yu Tongkui, Wang Renpu, Li Shuhua, Zeng Zhaoqiang, Rao Yutai, Sun Yun Zhu, Yang Zhongqian, Xu Baolu, Zhang Jinvong, Tang Yongtong, Meng Sen, and Feng Zhi, have contributed in organic chemistry, physics, geology, palaeontonlogy, mathematics, botany, philosophy, linguistics, history and western literature.

ないたいたか

and the second secon

State of the second

In the old China, since its founding in December of 1898 to being taken over by the people's government in January of 1949, Beijing University had gone through fifty years. That was the great year of victory for the revolutionary struggle of the Chinese people. In that half century, the progressive forces and the reactionary forces fought vigorously on campus. Under the leadership of the Chinese Communist Party, the vast number of patriotic students and faculty members carried forward the revolutionary tradition of the "May 4th" movement. From the "March 18th" tragedy to the "December 1st" tragedy, from the "December 9th" campaign to the anti-starvation, anti-civil war, and anti-suppression movement, they stood in the front of these struggles. They had the honorary tradition of revolution and contributed to the liberation of the people and the nation significantly. Before the peaceful liberation of Peiping, the Chiang Kaishek regime attempted to move southward by hijacking faculty and students, as well as University properties. However, with the exception of a few people who escaped to the south with Hu Shi, the faculty and students of the whole University insisted on protecting the institution under the leadership of the Underground Party. On January 31, 1949, new students were welcomed at Beijing University.

After the Liberation, a University Affairs Committee was set up. Professor Tang Yongtong was the Chariman. The leader of the Party and our country were very concerned with the growth of Beijing University. Mao Tsetung wrote to the students and faculty 3 times to encourage them to unite and to fight for the building of a new China. Chou Enlai personally inspected Beijing University 6 times. Furthermore, reports were prepared.

-12-

In order to meet the needs of socialistic economic and cultural construction, an adjustment program for the colleges and departments was gradually carried out for the higher education in our country. In June of 1949, the teaching education was unified throughout the country. It was decided that the teaching department at Beijing University be abolished. In September, the agricultural college of Beijing University merged with those of HuaBei University and Qing Hua University to become the Beijing Agricultural University. In December, the College of Medicine at Beijing University was designated to the Ministry of Health. However, it was called Beijing University Medical School by name (later changed into Beijing Medical School). In June of 1951, the economist, Professor Ma Yinchu was hired as the first president after the Liberation. In 1952, the engineering school of Seijing University was merged into Qing Hua University. The various departments in literature, law, and science at Qing Hua University and Yen Jing University, as well as the relevant departments in Fu Jen University and Zhe Jiang University, were merged into Beijing University. Thus, Beijing University became a socialistic comprehensive university in literature and sciences.

After the adjustment in schools and departments, there were 12 departments and 33 special fields, i.e. mathematical mechanics department (with 2 special fields in mathematics and mechanics), physics department (with 2 special fields in physics and meteorology), chemistry department (with 4 special fields in organic, inorganic, physical, and analytical chemistry), biology department (with 4 special fields in botany, zoology, plant pathology, human and animal physiology), geology and geography department (with a special field in natural geography), Chinese Linguistics and literature department (with 2 special fields in Chinese literature and news), history department with 2 special fields in history and archaeology), philosophy department (with 2 special fields in philosophy and psychology), economics department (with a special field in political economics), eastern languages department (with 9 special fields in eastern languages), Russian language department (with a special field in Russian language), and western languages and literature department (with 3 special fields in English, German, and French).

and the second second

-13-

in the states

In addition, a teaching and research program in Chinese revolutionary history and one on the basis of Marxism were set up to be responsible for offering courses such as "Revolutionary History of New Democracy in China" and so on to educate the students regarding the theory and ideology of Marxism. Furthermore, the University also had a pre-medical school program, a minority pre-medical school program, an overseas Chinese preparatory class, and a Chinese language class for foreign students.

With the development of socialistic construction, the Party and the country required Beijing University to train more qualified people in order to satisfy the needs of various talents from a variety of aspects. For this reason, the University gradually terminated some special fields. Moreover, some new disciplines were gradually added. For example: the pre-medical school program and the overseas Chinese preparatory class were merged into Beijing Medical School and the newly established Overseas Chinese Training School in the summer of 1953, respectively. The students in the minority pre-medical school program entered Beijing Medical School after completing all the courses. In 1954, the discipline of law was added and the law department was set up. In the Eastern languages department, a special field in Hindi was added. In 1955, the economical geography and geology disciplines were added. In 1956, the University expanded to include the geomorphology discipline, the geochemistry discipline, the computational mathematics discipline, the biochemistry discipline, the colloidal chemistry discipline, and the library science discipline. Moreover, the library science department was founded. In 1957, a Prussian class was added. In 1958, the physics research laboratory, which was founded in 1955, was rebuilt into the atomic energy department. In 1960, it was renamed the technical physics department with 2 special fields in nuclear physics and radiochemistry. In 1959, the radio department and geophysics department were newly established (both departments were off-springs of the physics department). In 1960, the Chinese literature department added the classical document discipline. In the meantime, the news special field was tranferred into Chinese People's University.

The Western languages department added a Spanish special field. The Eastern languages department added classes in Sanskrit and Bahrain. In the same, the political science department was established. The founding of new departments and special fields made Beijing University more suited for the needs in the construction of our country, in terms of training talented people. Under the leadership of the Party and our Government, the University was developing rapidly.

In 1962, the registered undergraduate student number on campus had reached 10,671. There were 280 graduate students. From 1949 to 1965, Beijing University raised nearly 20,000 college graduates and over 1,000 graduate students for our country. These graduates are widely distributed all over the country and most of them became the backbone of the front lines in engineering, agriculture, and scientific teaching. For example, Zhou Guangchao, Yangyao, and Zhang Guanho are their representatives. From 1950, the University began to accept foreign students. The teaching staff became stronger and stronger. Scientific research work was widely conducted. Some of the accomplishments have reached the advanced level in our country and some reached international standards. Among them, for example, the chemistry department collaborated with the biochemistry institute and organic chemistry institute of the academy of science of China to artificially synthesize insulin of a bull. Since 1955, two periodicals have been published (now bi-monthly) as the philosophy and social science edition and natural science edition of the Beijing University Journal.

In order to inherit and carry forward the honorable tradition /5 of the "May 4th" movement, after the entire country was liberated, Beijing University chose May 4th as its anniversary date. In 1952, Beijing University moved to the west suburb of Beijing, where the campus of Yen Jing University used to be.

In the ten year period of chaos, the agents of Lin Biao and the "Gang of Four" controlled Beijing University. They destroyed the leadership of the Party. They cruelly persecuted revolutionary cadres and intellectuals. The University was closed for 4 years. After classes resumed, they lowered the recruiting standards and dissolved the teaching and research

-15-

sections. They opposed the study of fundamental theories so that the quality of education was seriously lowered. The teaching and research work was stagnating.

After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Congress of the Party, the University gradually moved along on the right track through reorganization. Since 1977, the entrance examination system was restored. The learning period of the undergraduate was specified to be four years. The individual discipline was five years. Since 1978, each special field one-by-one gradually resumed recruiting graduate students. The studying period was limited to 2 to 4 years. The University emphasized the establishment of the teaching and research project and the learning of fundamental courses. Each department offered some new courses based on the need of its own specialities.

The university currently has 22 departments and 66 special fields:

Chinese Language and Literature Department

Literature Special Field

Sinology Special Field

Classical Document Field

History Department

Chinese History Special Field World History Special Field Archaeology Special Field

Philosophy Department

Philosophy Special Field

Economics Department

Political Economics Special Field

World Economics Special Field

National Economics Management Special Field

Law Department

Law Special Field

Economic Law Special Foeld

International Law Special Field

International Political Science Department International Political Science Special Field International Communism Movement History Special Field Library Science Department

Library Science Special Field

•

 $\cdot$ 

Western Languages and Literature Department English Language and Literature Special Field French Language and Literature Special Field German Language and Literature Special Field Spanish Language and Literature Special Field Eastern Languages and Literature Department

Japanese Language and Literature Special Field Hindi Language and Literature Special Field Indonesian Linguage and Literature Special Field Korean Language and Literature Special Field Arabic Language and Literature Special Field Burmese Language and Literature Special Field Thai Language and Literature Special Field Mongolian Language and Literature Special Field Vietnamese Language and Literature Special Field Prussian Language and Literature Special Field Urdu Language and Literature Special Field Russian Language and Literature Special Field

Russian Language and Literature Special Field Mathematics Department

Mathematics Special Field

Applied Mathematics Special Field

Conputational Mathematics Special Field

Physics Department

Physics Special Field Technical Physics Department Nuclear Physics Special Field Radiochemistry Special Field Radio Electronics Department Radio Physics Special Field Acoustics Special Field

Geophysics Department Geophysics Special Field Atmosphere Physics Special Field Space Physics Special Field Astronomical Physics Special Field Chemistry Department Chemistry Special Field Biology Department Bontany Special Field Zoology Special Field Plant Pathology Special Field Physiology Special Field Biochemistry Special Field Cell Biology Sp.cial Field **Biophysics Special Field** Heredity Special Field Geology Department Structural Geology and Geological Mechanics Special Field Seismological Geology Special Field Palaeontology and Stratigraphy Special Field Minerology and Geochemistry Special Field Geography Department Natural Geography Special Field Geomorphology and the Quarternary Period Special Field Economical Geology Special Field Computer Science and Technology Department Computer Software Special Field Computer System Structure Special Field /6 Microelectronics Special Field Psychology Department Psychology Special Field.

In the fall of 1980, the University had 6,984 undergraduate students and 650 graduate students. In addition, there were 90 night school students, 498 correspondence students, and 222 teachers taking advanced courses. Furthermore, the University also accepted 187 sutdents from 42 countries and regions. The University presently has 6,524 faculty and staff membersamong them 2,766 are teaching faculty members. Among the teaching faculty members, there are 136 full professors (12 of them are committee members of the Chinese Academy of Science), 266 associate professors, 1,561 lecturers, 71 teachers, and 732 assistants. In addition, 73 experts in various areas in the country are retained as part-time professors and associate professors.

The University currently has 22 research institutes, i.e. mathematics institute, solid state physics institute, theoretical physics institute, heavy ion physics institute, physical chemistry institute, molecular biology institute, computer science institute, remote control technology institute, radio electronics institute, Chinese character information processing technique institute, Asia and Africa institute, foreign philosophy institute, South Asia institute, Marxism and Mao Tsetung's ideology institute, philosophy of Mao Tsetung's ideology institute, ancient literature institute, western literature institute, institute of history of the Sui, Tang, Song, Liao, Jin Dynastles, and Russian literature institute. In addition, the work economics institute, economical problems of socialism institute, and ancient character institute are currently under preparation.

Beijing University has a number of older professors who are really knowledgeable. In addition, it has a group of middle age professors with relative political and business levels. In recent years, on the basis of the excellent tradition of rigorous studying, the policy of "double hundred" has been actively executed. Many older professors, such as Wang Li, Zhu Guaugqian, Li Ruqi, Huang Ziqin, etc., are writing books for the Four Modernizations. Important results have also been continuously obtained in scientific research. In the National Science Conference in 1978, there were 16 awards given to the projects being undertaken by Beijing University. There were 51 items winning awards in collaboration with other brother institutions.

In the area of academic exchange with foreign countries, Beijing University has already signed academic exchange agreements between institutions with 15 universities in the USA, Japan, Canada, Sweden, Australia, and Yugoslavia. Since 1979, nearly 200 professors and experts have given lectures in Beijing University. The number of professors sent to various international academic meetings approaches 200. There are 166 visiting scholars. It has already sent 265 undergraduate students and graduate students abroad to study.

The faculty and students in the radio department and mathematics department at Beijing University successfully studied the arrangement of Chinese characters in computers.



Beijing University has 3,300 thousand volumes of books in the library. There are over twenty thousand periodicals with over 150 thousand volumes. The library has 16 reading rooms and over 2000 reading seats. In addition, there are 20 departmental libraries.

Beijing University occupies over 2,250 acres. Presently, there are 400 thousand square meters in building area. In addition, the university is equipped with an instrument shop and and electronic instrument shop. These shops primarily serve the need in teaching and scientific research. In the meantime, they also undertake the tasks of the fabrication and production of new products. Recently, the Beijing University Press was established to publish various textbooks and reference books as well as to distribute the books written to the outside.

In the thirty years since the founding of the country, Beijing University has trained a large number of advanced special experts for the socialistic revolution and construction

-20-

in our country. In the new historic era, the faculty and students are working hard to adjust the university, to raise the teaching quality, to carry out scientific research, and to strengthen international academic exchange in order to further develop Beijing University into an education center and scientific research center.

University Anniversary Date: May 4th Honorary President: Ma Yinchu Present President: Zhang Longxiang Party Committee Secretary: Han Tianshi

#### CHINESE PEOPLE'S UNIVERSITY

Address: Hai Dian Road, Hai Dian District, Beijing.

Chinese People's University was founded on October 3, 1950. Its predecessors are Shan Bei Public School, Hua Bei Consolidated University, Northern University, and Hua Bei University.

Shau Bei Public School was founded in September 1937 at the revolutionary holy land of Yan An. Chang Fangwu was the principal. Shan Bei Public School was open for two years. The emphasis was placed on the learning of the original Marxism and the correlation between theory and reality. It had trained nearly ten thousand cadres for the Chinese revolution.

In 1937, based on the development and the need of the status of the Anti-Japanese War, Shan Bei Public School merged with part of Yan An Lu Xu School of Arts, Yan An School for Workers, An Wu Fort Youth Training Class, etc. to form the Hua Bei Consolidated University. The university established five colleges in social science, law and politics, education, culture and literature, and foreign languages. It was operating for nearly ten years and provided training for a great number of cadres for the Anti-Japanese War and the construction of new China.

In 1948, the liberation war was finally victorious. In order to satisfy the requirements of the new situation, Hua Bei Consolidated University merged with Northern University in the region of Jin, Ji, Lu, and Yu to form Hua Bei University. Wu Yuzhang was the president, Fan Wenlan and Chang Fang Wu were the

/7

vice presidents. The University was divided into four parts: one was the accelerated political training class, two was the education school, three was the school of arts and literature, and four was the research departments. Hua Bei University was closed at the end of 1949.

After the founding of People's Republic of China, in order to train special people for socialist revolution and construction, the Ministry of Political Affairs passed the ((decision on the establishment of Chinese People's University)) on December 16, 1949. Therefore, the first regular modern University in China -Chinese People's University was born.

On October 3, 1950, Chinese People's University held its opening ceremony. The leaders of the Party and nation, Liu Shaoqi and Zhu De were personally present. Furthermore, Liu Shaoqi gave a speech.

In the initial period, the undergraduate classes at Chinese People's University had departments such as: economic planning, financial credit, factory management, co-operative institutions, trade, law, foreign affairs, and Russian, etc. The special fields included: economic planning, finance and banking, foreign trade, domestic trade, co-operative institutions, factory management, statistics, law, records, foreign affairs, education, and history geography. In addition, there were preparatory courses in engineering and agriculture so that older cadres at below high school levels could catch up.

In 1950, there were 4,258 students; among them 72% were cadres and workers. Young students occupied 28%. 45% of the students were Party members. 23.5% of them were Youth League Members.

In 1952, the Marxism Research Institute was founded to train teachers of political theory in higher education institutions.

In 1952, the schools and departments of higher education institutions in the country were reorganized. The Central Finance and Economics were merged into the Chinese People's University.

In 1954, the agricultural economics department and statistics department were founded. The foreign trade special field was merged into the foreign trade college. The labor special field

-22-

was taken over by the Ministry of Labor. The Labor Cadre School was founded. The finance and economics departments changed to a four year system from a three year system.

In 1955, the news department and the historical archive department were founded. The Russian department and foreign affairs department were reassigned. The Russian Language College and the Foreign Language Affairs College were established.

In 1956, the philosophy, history, and economics departments were added.

In 1958, the history department was divided into the Marxism fundamentals department and the Chinese Communist Party history department. The Marxism institute was eliminated.

In 1960, the Chinese language and literature department and four institutes in philosophy, politics, economics, and history were founded. In the meantime, the national economical planning department and the statistics department were merged into a planning economics department. The finance department and the commerce department were merged into a finance and commerce department. The agricultural economics department changed its name to the people's commerce economics department.

In 1964, the University had a fixed size of 4,000 students. It had 12 departments in: philosophy, international politics, political economics, history, news, law, Chinese literature, archive, industrial economics, planning statistics, finance and commerce, and agricultural economics.

In 1966, the Chinese People's University accepted over 400 foreign students from 24 countries.

President Cheng Fangwu of Chinese People's University attending a class.



-23-

Since 1951, Chinese People's University began to make arrangements to set up correspondence education. A correspondence education committee was established. Furthermore, it began to accept students. In 1953, the correspondence department was officially established.

During the ten year period of chaos, Chinese People's University was seriously damaged. In December 1969 to December 1972, the University was transferred to a lower level to Yu Jiang County in Jiangxi Province to become a "May 7th Cadre School." In 1973, it was officially dissolved. It was terminated for over 8 years. The faculty and staff were seriously devastated. The teaching equipment and library information was totally lost.

After crushing the "Gang of Four," the State Council decided to restore Chinese People's University in July 1978.

Presently, Chinese People's University has 15 departments and 22 special fields. It is operating on a four year system.

Philosophy Department

Philosophy Special Field

Political Economics Department

Political Economics Special Field

World Economics Special Field

Scientific Socialism Department

International Communism Movement History Special Field Chinese and Communist Party History Department

Chinese Communist Party History Special Field History Department

Chinese History Special Field

Law Department

Law Special Field

Literature Department

Chinese Literature Special Field

News Department

News Special Field

Archive Department

Archive Special Field

Industrial Economics Department Industrial Economics Special Field Basic Construction Economics Special Field Agricultural Economics Department Agricultural Economics Special Field Trade Department

Commercial Economics Special Field

- Note: 1. An Wu Fort Youth Training Class: An Wu Fort is located in Shanxi Province Zhu Yang County. It is approximately 90 Chinese miles from Xian. After the start of the Anti-Japanese War, it was founded in order to attract the large number of revolutionary youth from the nationalist controlled region and the occupied region. The founders were Feng Wenbin and Hu Qiaomu.
  - 2. After Hua Bei Consolidated University was founded, parts of Yan An Lu Xun Arts School and An Wu Fort Youth Training Class continued to operate in Yan An.

/8

Students in the trade department of Chinese People's University were attending the laboratory.



Commercial Product Special Field Finance Department

-25-

Finance and Banking Special Field International Banking Special Field Financial Affairs and Accounting Special Field Planning Statistics Department National Economic Planning Special Field Statistics Special Field Production Distribution Special Field

Economical Information Management Department

Economical Information Management Special Field In 1980, there were 2,083 undergraduate students and 236 graduate students.

The University presently has 3,014 faculty and staff members; among them 1,040 are full-time personnel. In the teaching staff, there are 18 professors, 198 associate professors, 587 lecturers, 213 teachers, and 24 assistants. There are 294 scientific research personnel. In addition, 8 foreign experts are hired.

Chinese People's University is serious about scientific research work. It insists on the policy of correlating theories to reality. Presently, the University has a Marxism development history institute, Russia and Eastern Europe institute, foreign economics institute, Qing history institute, population theory institute, and language and character institute.

In the most recent years, Chinese People's University has already compiled 173 kinds of teaching materials and lecture notes, 32 teaching outlines and 161 reference books. Among them, ((comments on the principle of materialism)), ((history of economic theories)), ((lecture notes on Chinese revolutionary history)), ((introduction to industrial economic management)), ((introduction to industrial management)), ((capitalistic money circulation and credit)), ((outline of Chinese history)), ((modern history in Chinese literature)), and so on, are among the 41 of better quality.

In order to satisfy the need of socialistic construction, Chinese People's University will strengthen the training of social science theoretians, economic managers, and the teaching staff in politics at higher education institutions. In the construction and development aspect, the emphasis will be placed on political theory and economic management. In the meantime, the advantages and specialties in special fields such as law, archive, news, Qing history, and literature will be fully carried forward.

In the long developmental period, Chinese People's University has inherited the excellent revolutionary tradition. The academic atmosphere of "studying theories, correlating to realities, reforming the thoughts, and treating problems correctly" and the University tradition of "united closely together, realistic and practical, following the life of the mass, working hard and living humbly."

In the thirty years since its founding, Chinese People's University has trained over 60 thousand specialists in Marxism theory and economic management. In addition, it has educated over 10 thousand correspondence students.

Presently, the University has over 2 million, 500 thousand volumes of books in which over 200 thousand volumes are foreign books. There are over 6,000 periodicals, in which there are over 1,000 types of foreign newspapers and magazines.

The University has over 40 information rooms and laboratories (computer rooms). Currently, the University is gradually adding advanced equipment. It works hard to improve the standard of books and data, as well as the scientific management of the laboratories.

The publications edited and published by Chinese People's University include ((Teaching and Research))-(bimonthly) and ((Economic Theory and Economic Management))-(bimonthly).

1.2.2.2.2.2.2.

ACAREAS CARACTER

In the early fifties, Chinese People's University built its campus on the west suburb of Beijing. It occupied 1,635 acres. The construction area was over 300 thousand square meters. During the ten year chaos period, the land and buildings on campus were seriously damaged. Currently, it still has 992 acres of land. The building area is nearly 200 thousand square meters.

In the summer of 1980, the university restored the correspondence school. Furthermore, it began to recruit 1,000 students in the Beijing area.

Chinese People's University has a press, a machine shop, and a newspaper and information room. The press is mainly responsible for the publication of various teaching materials, teaching reference materials, and scientific research papers written and translated within the university. In the meantime, it also assumes the duty of printing some other teaching materials in literature. The machine shop mainly serves the teaching experiments for science special fields such as the industrial economics department. In the meantime, it also undertakes the production duty of part of the teaching equipment. Furthermore, it also produces universal tool grinders in small batches. The newspaper and information room edit and publish newspapers and information to serve the education, scientific research, and culture departments in the country.

In addition, there are affiliated high schools and elementary schools.

In order to strengthen the correlation between theories and realities, to continuously grasp the new situations and new problems in scientific development, Chinese People's University is particularly interested in establishing relationships with scientific research departments to ascertain the collaboration relationship. It is actively involved in the academic exchange activities between higher education institutions, scientific research organizations, and academic groups. Presently, it has already established some academic exchange relations with some higher education institutions in some foreign countries. Some foreign scholars have toured, visited, and lectured at the University. In the meantime, teachers were chosen to study abroad and to participate in academic research. Through these activities, the friendship between foreign scholars and Chinese People's University has been improved. It has a certain promotional effect on the teaching and scientific research work.

1

University Anniversary Date: October 3rd Current President, First Secretary of Party Committee: Cheng Fangwu Second Secretary of Party Committee: Guo Yingiu

-28-

The students at Chinese People's University were doing artistic exercise.



## QING HUA UNIVERSITY

School Address: Qing Hua Garden, Hai Dian District, Beijing.

/9

The predecessor of Qing Hua University is Qing Hua College, which was founded in 1911 by the Qing Government using part of the money "returned" by the United States in the 1900 reparation. It was a preparatory school for students going to study in the United States.

In 1900, the armies of eight countries invaded China. In 1901, the Qing Government and the various countries signed the "Xing Chou Treaty" to pay 450 million ounces of silver, in which the United States obtained 32 million ounces. It was equivalent to over 240 million U.S. dollars, After 1904, through negotiation, the U.S. Government decided to "return" part of the reparation (approximately 11 million U.S. dollars) gradually by the month from 1909 to 1940. It was designated to be used in cultural and education affairs. In 1909, the Qing Government established an office to handle the affairs of studying in the U.S. Four different groups of students were sent directly to the U.S. to study. On April 29, 1911, Qing Hua College officially opened its door. It had an advanced class and a medium class. All the systems were the same as American schools. After the revolution of 1911, Qing Hua College became Qing Hua School. The undergraduate college was established in 1925. Furthermore,

-29-

the school began to recruit four year college students. After the take over by the nationalists in 1928, the name of the school was changed into "National Qing Hua University." The next year, the old system was completed. Thus, the transition from a preparatory school for study in the U.S. to a University was accomplished. After the eruption of the Anti-Japanese War, Qing Hua University was moved south to Kun Ming to form the Southwestern Consolidated University together with Beijing University and Nan Kai University. During the war era, under conditions of extreme difficulty, great accomplishments were made with lots of hard work. It was considered as a "miracle." After the victory of the anti-Japanese war, it was returned to Beijing in 1946. At that time, there were 5 colleges in literature, law, science, engineering, and agriculture with 26 departments. The system, course, teaching material, and teaching method adopted the American system. From its founding in 1911 to 1929, there were 1,289 graduates who completed their preparation to go to the U.S. for further study. Since the founding of the undergraduate college in 1925 to the Liberation in 1948, there were 2,549 college graduates from Qing Hua University. Among them, there were 742 in engineering. There were 138 graduate students who completed their programs. Before the Liberation, Qing Hua University occupied 1,100 acres. The building area was 100 thousand square meters.

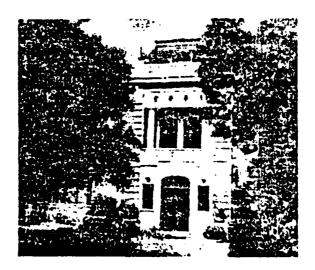
The Qing Hua University of the old China, after all, was established on Chinese soil. The faculty and students were, after all, living among Chinese people. They could not help but be aware of the suffering of the nation and the anti-imperialism patriotic struggle of the people. They could not but reflect the patriotism of the Chinese people. Therefore, Qing Hua is another school with a honorable revolutionary tradition.

Before the Liberation, the faculty and students at Qing Hua University had fought bravely against imperialism, northern war lords, and nationalist reactionaries. The faculty and students of Qing Hua participated in the "May 4th" movement. In 1926, they also participated in the "March 19th" anti-imperialistic patriotic demonstration. Freshmen student, Shu Jiesan sacrificed

-30-

his life with honor. In November of 1926, the first branch office of the Chinese Communist Party was set up on the campus of Qing Hua. In 1935, in the serious crisis of our nation, the Qing Hua publication ((the roar)) cried out the common voice of students in Beiping and Northern China that: "As large as northern China is, there is no longer room to place a desk peacefully." The epoch-making anti-Japanese campaign of "December 9th" erupted. Qing Hua students became an important power in the Chinese student movement. At Southwestern Consolidated University, the "December 1st" student movement to resist civil war and to fight for democracy was initiated in December of 1945. Professor Wen Yiduo "pounded the table and stood up" to devote himself to the democratic movement. In July of 1946, he was assassinated by nationalist agents. During the liberation war, Qing Hua students

The Lecture Hall of the original Qing Hua College in Qing Hua University.



bravely participated in the struggle of anti-hunger, anti-civil war, and anti-suppression. In August of 1948, Professor Zhu Ziqing would rather starve to death than collect "charity food" from the United States. He lost his life due to poverty and illness. Mau Tsetung highly praised Professors Wen Yiduo and Zhu Ziqing by saying that "they expressed the heroic spirit of our nation."

In the several decades of development at Qing Hua University, the large number of patriotic teachers taught seriously with the

good wish that "education will save the country." The good atmosphere of rigorousness and seriousness was brought about. A group of famous scholars, professors, engineers and scientists had been raised. Our famous scientists Zhu Kezhen, Gao Shiqi; mathematicians Jiang Lifu, Zhao Fangxiong, Duan Xuefu; physicists Ye Qisun, Sa Bendong, Zhou Peiyuan, Qian Sangiang; chemists Zhang Zigao, Yang Shixian, Huang Ziging; architects Zhuang Jun, Yang Tingbao, Ling Sicheng; experts in mechanics Qian Weichang, Wu Zhonghua; civil engineering and irrigation experts Shi Jixi, Tao Baokai; writers and artists Hong Shen, Wen Yiduo, Cao Yu; philosophers Jin Yuelin; linguist Wang Li; economist Chen Daisun; etc. were students of Qing Hua at various times. In addition, Qian Xuesen, Xiong Qinglai, Hua Luogeng, Zhang Guangdou, Ma Yinchu, Zhu Ziqing, Wu'Youxun, Chen Yinke, and Ma Yeuhan, as well as American scholars Zhou Yuanren, Li Zhengdao, Yang Zhenning, Lin Jiaqiao, Chen Snengsheng, and Ren Zigong were at Qing Hua at various stages as students. In addition, many cadres and backbones in the scientific areas graduated from Qing Hua.

/10

On December 15, 1948, Qing Hua University was liberated. In order to suit the need of socialistic construction and to obey the instructions of the Party Central and the Central People's Government, the colleges and departments were reorganized in 1952. The schools of literature, science, law, and agriculture were reassigned to Beijing University, Chinese People's University, and Beijing Agricultural University, respectively. The departments of petroleum, mining, aerospace, and geology in the school of engineering were merged into the relevant departments in other institutions to form the college of petroleum, college of mining, college of aerospace, and college of geology. After the rearrangement, Qing Hua University had 6 departments: architecture department, civil engineering department, irrigation department, mechanical manufacturing department, power machinery department, and electrical engineering department. In the middle fifties, based on the need of national economic development, the radio department, automatic control department, engineering physics department, chemical engineering department, engineering mechanics and mathematics department, and metallurgy department were added.

Qing Hua University was gradually developed into a socialistic science and engineering University. The Party leadership and political work system was established in the University. Courses in Marxism were offered. Special fields and teaching and research groups were founded. Based on the plan of the country, a unified entrance examination system was adopted. The proportion of worker and farmer background students gradually increased. The teaching system and teaching policy method were gradually reformed. The University practiced a system in which teaching, scientific research and productive labor are combined together. New special fields and experimental basis with advanced standards were established. Scientific research institutes were set up. Factories and shops serving the teaching and scientific research work were expanded. Under the premise insisted by the University that teaching is the primary task, scientific studies were actively pursued. When the students were in school, simultaneous to the studying of fundamental courses and special field theoretical courses, they also participated in scientific research and actual production work. Theories are correlated to the reality so that the quality of teaching and the academic standards were significantly improved. The school was involved with nearly one hundred important scientific research projects. Many important scientific research results were obtained. The important design work of the My Yun Dam was completed, Some of the scientific research, production, and design items have reached advanced levels domestically or internationally, The size of the school has also been developed significantly,

Callada Callada Carlada in 1. . .

During the ten year chaos period, under the destruction and control of the people with Lin Biao and the "Gang of Four," Qing Hua University was severely damaged. The normal recruiting system was abolished. The teaching order was disturbed. The basis for teaching and research, and the material and equipment were destroyed. The cadres and the teaching staff were oppressed and attacked. The quality of teaching declined seriously.

After the "Gang of Four" was crushed, Qing Hua University was revived. Under the care of the Party Central, the entire school opened up a "expose, criticize, and examine" campaign

-33-

against the "Gang of Four." The system established by the "Gang of Four" at Qing Hua was crushed. We brought order out of chaos and firmly executed the policy of the Party fully. The innocent and wrong cases were reversed. Reorganizations have been or are in the process of being carried out in various aspects of work in the University.

te:d

The university added departments and special fields in science and management. Presently, it has 16 departments and 43 special fields.

Architecture Department

Architecture Special Field

Civil and Environmental Engineering Department Construction Structure Engineering Special Field Environmental Engineering Special Field Hydraulic Engineering Department

Hydraulic Hydroelectric Engineering Construction Special Field

Farmland Irrigation Engineering Special Field

Hydraulic Machinery Special Field

Mechanical Engineering Department

Metallic Materials Special Field

Welding Special Field

Forging Special Field

Casting Special Field

Precision Instrument Department

Machinery Manufacture Technology, Equipment, and Automation Special Field

Optical Special Field

Optical Instrument Special Field

Gyroscope and Guidance Atuomatic Control Special Field

Thermal Engineering Department

Thermal Engineering Special Field

Gas Turbine Special Field

Air Conditioning Engineering Special Field

Automotive Engineering Department

Automotive Special Field

Internal Combustion Engine Special Field

Electrical Engineering Department Power System and Its Automation Special Field High Voltage Technology and Equipment Special Field Electrical Engineering Special Field Radio Electronics Department Radio Technique and Information System Special Field Electronic Physics and Laser Special Field Semiconductor Device and Physics Special Field Computer Engineering and Science Department Electronic Computer Special Field Computer Programming System (Software) Special Field Automation Department Industrial Automation Special Field Industrial Instrument and Automation Special Field Engineering Physics Department Reactor Special Field Accelerator Physics Special Field Modern Physics Special Field Physical Separation Special Field Solid State Physics and Materials Science Special Field Chemistry and Chemical Engineering Special Field Physical Chemistry and Instrument Analysis Special Field Applied Chemistry Special Field Chemical Engineering Special Field Macromolecular Chemical Engineering Special Field Inorganic Non-Metallic Materials Special Field Engineering Mechanics Department Fluid Mechanics Special Field Solid State Mechanics Special Field Engineering Thermal Physics Special Field Applied Mathematics Department Applied Mathematics Special Field Economic Management Engineering Department Economic Management Mathematics and Applied Computer Techniques Special Field In addition, there is a research institute of teaching fundamental courses.

.

/11

In 1980, there were 7,604 undergraduate students and 751 graduate students.

Since 1981, the graduate students were divided into master degree graduate students and doctor degree graduate students. The learning period is two to three years.

Qing Hua University presently has accepted 54 foreign students from 22 countries.

The entire school currently has 8,100 faculty and staff members; among them there are 3,723 teaching members. In the teaching staff, there are 109 professors, 484 associate professors, and 1,635 lecturers. There are 27 teachers and 1,468 assistants.

In recent years, Qing Hua University has adopted various measures to strengthen the teaching of fundamental theories and preparation of teaching materials. Many experimental teachers participated in lecturing and writing and evaluating teaching materials. In the past three years, 110 kinds of teaching materials have been written and 85 kinds have been evaluated.

Qing Hua University has 87 laboratories. Through restoration and reorganization, a computer center, an analytical center, and a number of laboratories with advanced equipment and instruments such as microprocessors were established. The means to study science has been strengthened to better train the students.

Qing Hua University, over the years, has focused its attention on scientific research work. In recent years, some new developments have taken place. The teaching faculty members are actively involved in accomplishing the teaching job on the one hand, while on the other hand, they are also engaged in research. In the 1978 national science conference, 77 scientific research results were praised. In the eighth scientific report meeting for the whole campus in 1978, there were over 290 papers exchanged. In 1979, 537 academic papers were completed. Furthermore, 76 items in scientific research attained the final goals or milestones. Among them, 40 items were honored by the relevant department of our government and the city of Beijing. For example, the "automatic compensating double frequency laser interferometer" developed by the precision instrument department, fundamental courses department and automation department was given a first class award by the City of Beijing. The department

-36-

of chemistry and chemical engineering developed silicon nitride tools and dies which are capable of cutting materials hard to machine such as magnetic steel, thermally decomposed graphite, and cold hardened cast iron. The lifetime of the cutting tool is several times higher than that of the hard alloy tools. It also received a first class award from the City of Beijing. The DJS-140 computer developed by the computer department is the kind of machine urgently needed in our country for scientific calculation, data processing, and real time control. It was given a first class award by the ministry of the Fourth Machinery. The thermal energy engineering department participated in the completion of the new product test manufacturing of the 300 thousand ton synthetic ammonia and 240 thousand ton urea facility, It was awarded a first class award by the Ministry of the First Machinery. Simultaneous to solving the construction needs of the Four Modernization, the study of fundamental theory is also strengthened. For example, Professor Qian Ning in the department of hydraulic engineering completed the work entitled, "Opinions on the control of lower reaches of the Yellow River;" Professor Qian Weichang in the department of fundamental courses finished the "Study on the generalized variation principle in elastic theory and its application in the finite element computation;" and the young mathematics teacher Qi Ligun completed the ((Zone verification method for non-linear equations)) which has been praised as the "Morr-Qi Liquan" formula. These papers have been seriously looked upon and praised by scholars in and out of our country.

Students at Qing Hua University are working in the microprocessor laboratory.



 $\left\{ \cdot \right\}$ 

-37-

Main lecture hall of Qing Hua University.



Qing Hua University is equipped with 9 factories (work shops) to serve the needs in teaching, research and intermediate testing. They also undertake the tasks of student practice and product fabrication. Some of the products, such as the phase apparatus and laser double frequency interferometer, have advanced standards in our country.

In order to summarize the results of teaching exchange and scientific research, there are publications such as ((Qing Hua University Journal)) and ((Education Study News)) on campus,

Qing Hua University has actively been engaged in academic exchange with universities and research institutions in our country. Each year, a group of teachers with a certain academic level will be sent abroad for visiting or to attend academic meetings. Furthermore, the university sends students to foreign countries for advanced studies. In recent years, it has invited over 50 foreign scholars and professors to visit the University and to give lectures.

Presently, the library at Qing Hua University has nearly 2 million books; among them natural science books occupy nearly two thirds and social science books occupy one third. Chinese books take up two thirds and foreign books (English, Russian, Japanese, French, German, etc.) take up about one third. There

-38-

CONTRACT CONTRACT

**U** 

are over 3,000 kinds of periodicals in Chinese and foreign languages. The library has established a scientific and technological information exchange system with over 200 universities and research organizations in nearly 100 foreign countries and territories.

Qing Hua University occupies 3,200 acres. Presently, the building space is 550 thousand square meters.

During the thirty years since Liberation, Qing Hua University has trained and raised nearly 50 thousand engineering and scientific people for our country. This is equivalent to 20 times the total number of students at Qing Hua University before our Liberation. These graduates, most of them, support socialism and love the communist party. They have good career levels. Some of them have already become the backbones in scientific research, technology, and teaching.

> School Anniversary Date: Last Sunday in April Present President, Secretary of Party Committee: Liu Da

## NORTHERN JIAOTONG UNIVERSITY

**.** 

School Address: Shang Yuan Village, Outside Xi Zhi Gate, Beijing. The Northern Jiaotong University was founded in May of 1909.

When it was first founded, it was the railroad management training center established by the postal department of the Qing Government. The school system was three years for advanced classes and one year for preliminary classes. There were 320 students. The school was located at Prime Minister Li's Lane in Beijing. It occupied 33 acres. In 1910, the postal and telegraph class was added and its name was changed to the transportation training center.

In December of 1916, the Bei Yang Warlord Government's Ministry of Transportation decided to split the transportation training center into the railroad management school and the postal and telegraph school. The school system was three years. In addition to the original management classes in English and French, there were Japanese and Russian management classes. From 1919, it began to send students to foreign countries such as the U.S.A., England, Japan, and France.

-39.

/12

In the summer of 1921, the Bei Yang Warlord Government's Transportation Ministry ordered the merge of Shanghai Industrial School, Tangshan Industrial School, Beijing Railroad Management School, and Postal & Telegraph School into the Jiatong University. The University had three campuses: Jiaotong University - Beijing Branch, Jiaotong University - Shanghai Branch, and Jiaotong University - Tangshan Branch. The school adopted a six year (2 years in preparatory classes and 4 years in undergraduate classes) program. The three campuses recruited students at the same time. All the adjustments in various departments were also carried out simultaneously. In the summer of 1922, Jiaotong University was abolished. The three aforementioned campuses were changed into Shanghai Nanyang University and Tangshan University. Furthermore, the Beijing campus was changed into a branch campus of Tangshan University. Later, due to the opposition of the faculty and students at Beijing, in the spring of 1923, it was changed to Beijing Jillotong University. In 1928, the nationalist's government formed the Ministry of Railroad. These three campuses in Beijing, Tangshan, and Shanghai were merged into Jiaotong University. The administrative department was located in Shanghai. The Beijing campus was changed to Peiping Jiaotong University Railroad Management College. In February of 1929, it was changed once more into Jiaotong University Peiping Transportation Management College. In July, it was changed again to Jiaotong University Peiping Railroad Management College. In 1931, it began to accept graduate students. After the "July 7th" incident in 1937, the faculty and students gathered together to resume classes in Human Province Xiangtan County, Yaujiatan in the spring of 1938 under the total support of the alumni association. In the same winter, classes were moved to Pingyu (Fuquan) in Guizhou. The name was changed to Jiaotong University Guizhou campus. There were 3 departments in civil engineering, metallurgy, and management. In the winter of 1944, it was moved to Bishau Ding Jia Ao in Sichuan until the victory of the Anti-Japanese War in 1945.

125

In 1946, the school was moved back to the original campus in Peiping. The name was changed to National Peiping Railroad

-40-

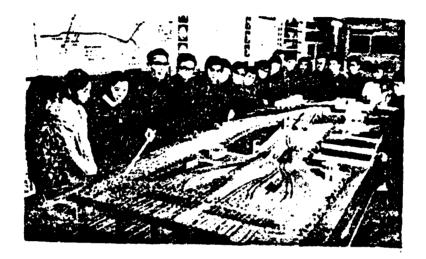
Management College. The undergraduate program was 4 years. The medium level technical program was 2 years. There were four courses: fundamental courses, fundamental courses in social sciences, courses related to transportation engineering, and courses in modern scientific management. These courses were divided into mandatory and elective courses. Furthermore, the credit system and the scholarship system were in practice. The maximum number of students was 400.

Before the Liberation, the students at Peiping Railroad Management College were actively involved in patriotic democratic movements. In 1919, they joined the "May 4th" movement. During the "September 18th" incident, they joined the movement to "go south to file petitions." In the "December 9th" campaign, they participated in the struggle against armed soldiers and policemen. In 1947, under the leadership of the student league of Peiping, they joined the struggles against the reactionary rule by the nationalist party to oppose to hunger, civil war, and oppression. On the eve of Liberation, they carried out the campaign against relocation of the University in order to protect the University, awaiting the Liberation of Peiping.

In February of 1949, Peiping was liberated peacefully. Peiping Railroad Management College was revived.

On March 5th, the military representatives from the Railroad Department in the People's Liberation Army Military Committee were ordered to take over the University. In June, the Railroad Department decided to merge the Peiping and Tangshan campuses together with the Huabei Jiaotong University which was founded in October 1948 (at Shijiazhuang) to form the China Jiaotong University. The administrative department was located in Beijingto and led the two campuses. Students were recruited in a unified manner. Before the Liberation, Peiping Railroad Management College had 4 departments in transportation, business, economics, and materials. After the Liberation, the business and transportation departments were merged. Furthermore, it added a postal and telegraph department and a Russian language class. In the same fall, the college affairs committee was formed to reorganize the affairs of the University. The nationalist party's courses and its advising system were abolished. Courses in Marxism and Mao Tsztung's thought were established.

**Professors** at Northern Jiaotung University are lecturing on railroad transportation to students.



In September of 1950, the Central People's Government changed China Jiaotong Univeristy to Northern Jiaotong University. Furthermore, the famous bridge expert Mao Yisheng was the president. Professors Liu Chijing and Gu Yisun were retained as deans for the Beijing and Tangshan campuses by the Ministry of Political Affairs.

In 1952, all the higher education institutions in the country were reorganized. Northern Jiaotong University administration center was abolished. The Beijing and Tangshan campuses became independent railroad colleges, which were under the direct guidance from the Ministry of Railroad.

After the reorganization of all the departments in the higher education institutions in the country, in order to suit the development of education, Beijing Railroad College sent faculty to assist the construction of new institutions quite a few times.

During the initial period of our government, in order to speed up the training of high level special railroad personnel, it had been decided that the learning period of the students /13 .

Die

should have been 3 years instead of 4 years. Since 1952, it was restored to 4 years. In 1955, it was changed to 5 years.

In July and December of 1958, a mechanical engineering department and an electrification engineering department were added, respectively. The department of mechanical engineering had two special fields in steam engines and railroad carriages. The department of electrification engineering had two special fields in electrical engine and electric railroad power supply. In September of 1960, the two departments merged to become a department of engine and electricity. In September of 1962, the mechanical engineering department was restored. In 1962, the correspondence course department was founded. It had special fields in transportation, economics, telecommunciation, and signal. The correspondence students reached over 1,300.

In order to speed up the training of technical cadres in various departments of the railroad, and to raise the technical level of the cadres on duty, the University had held short term special field classes, cadre classes, accelerated middle school classes for workers and farmers, and preparatory courses for workers between 1953 - 1960. In this period, the Ministry of Railroad had sent five batches of bureau level cadres to study at the University. There were special fields in transportation, economics, and signal. The total number was 250. The learning period was 2 to 3 years. The University held two accelerated middle school classes of workers and farmers. The system was 4 years. There were 200 students. It recruited 55 students in the preparatory class for workers. After one year of learning, they entered the undergraduate program to continue their studies. Furthermore, various special field training courses, such as industrial transportation, loading and unloading machinery, overall transportation economics, radio electronics, machinery manufacturing technology, manufacturing of railroad automation equipment, refridgeration transportation, and underground railroad, were offered. The studying period was one year. There were 302 students.

Since 1955, the University began to accept graduate students. Until 1964, 76 graduate students were trained. From 1954-1966,

-43-

the University accepted 74 foreign students from various countries.

In 1961, the university thoroughly executed the "adjustment" policy to further reorganize the affairs in the school. The teaching order was restored. In 1963, the academic committee was set up. In the meantime, a physics and chemistry department was added to strengthen the fundamental courses in mathematics, physics, chemistry, and foreign languages. In 1965, the faculty and staff number reached 1,274. There were 619 full-time teaching members. There were 3,051 students.

In the ten year period of chaos, Beijing Railroad College was driven to Henau. Later on, it was moved to Hebei. The destruction was very severe. It stopped accepting students for 5 years. In 1970, the school name "Northern Jiaotong University" was restored via the approval by the State Council.

After the "Gang of Four" was crushed, Northern Jiaotong University strengthened its leadership, enriched its teaching staff, established the normal teaching order, and gradually improved the teaching quality through reorganization and restoration.

Northern Jiaotong University presently has 8 departments, 16 special fields, and 2 teacher training classes. Furthermore, there is a fundamental course department.

Railroad Telecommunication Departmnet

Railroad Telecommunication Special Field Railroad Wire Communication Special Field Railroad Radio Communication Special Field Railroad Machinery Department

Internal Combustion Locomotive Special Field Railroad Carriage Special Field Locomotive Electric Transmission Special Field Locomotive Diesel Engine Special Field Railroad Mechanization Special Field

Railroad Construction Department

Railroad Engineering Special Field

Industrial and Civilian Construction Special Field Electronic Engineering Department Electronic Computer Hardware Special Field

Electronic Computing Technique (Software) Special Field

Railroad Transportation Department

Railroad Transportation Special Field Railroad Economics Department

Railroad Transportation Economics Special Field Railroad Finance & Accounting Special Field Railroad Materials Department

Railroad Material Technical Management Special Field Mathematics and Science Department

Mathematics Teacher Class

Physics Teacher Class

Fundamental Course Department

Since 1977, the undergraduate program has been changed to 4 years. Since 1978, all special fields began to accept graduate students. The studying systems are two and three years. In September of 1980, the University had 2,582 undergraduate students, 65 graduate students, and 16 foreign students.

There are 1,670 faculty and staff members; among them, 750 are full-time teaching members. There are 23 professors, 60 associate professors, 524 lecturers, 7 teachers and 136 assistants.

In the area of scientific research work, there are two research institutes in information science and railroad transportation management, and two laboratories in remote sensing and optical cable communication. Since 1956, the University has carried out over 150 major scientific research tasks. The major accomplishments include the SM-2 harmonic acoustic coder, co-axial electrical cable, railroad symmetric cable, constant temperature controller in railroad refrigeration cars, concentrated railroad circuits for small stations along the Qing-Zing Railroad, Seamless railroad, 4000 horse power gas turbine engine locomotive, automation of passenger car statistics, waste water treatment on the washing line of railroad freight cars, concentrated communication, interference of communication and guidance due to locomotive signal and electrification of railroad, etc. These scientific research results have an active effect on the modernization of railroad construction and the improvement of quality of teaching.

In August of 1979, the academic committee was restored. In recent years, Northern Jiaotong University strengthened academic

exchange activities with experts and professors from related institutions and scientific research organizations. Since April of 1980, 64 foreign experts and professors have been invited for visits, seminars, and lectures. In the meantime, 8 outstanding teaching members were sent to foreign countries to study. Through these activities, the friendship and interaction with foreign scholars and experts have been promoted. This has some effect on the teaching and research work.

Northern Jiaotong University has a publication, which is the ((Northern Jiaotong University Journal)).

The university has 41 laboratories, 2 practice factories, a scientific display hall, and an electrification education hall. They are providing better conditions for teaching and research.

The library currently has over 630 thousand volumes of books and magazines. Among them, there are 520 thousand books, 30 thousand periodicals, and 80 thousand volumes of data.

Northern Jiaotong University occupies 640 acres. The building area is over 100 thousand square meters.

In the thirty years since the Liberation, Northern Jiaotong University has trained over 11,000 railroad experts, which is more than five times that during the forty years before the Liberation. It had trained 234 cadres at above the bureau level. It has raised 71 graduate students. They have contributed to the socialist revolution and socialistic construction in our country. In the meantime, the University has trained over 300 foreign students.

> School Anniversary Date: May 2. Current President, Secretary of Party Committee: Wang Jiauxin

> > /14

BEIJING INSTITUTE OF AERONAUTICS AND ASTRONAUTICS School Address: XeuYuan Road, Hai Diau District, Beijing.

Beijing Institute of Aeronautics and Astronautics was founded on October 25, 1952 by merging the aeronautics departments at Qing Hua University, Bei Yang University, Xia Men University, Si Chaun University, Yuan Nan University, Northwest Engineering Institute, and Beijing Industrial Institute, as well as the aeronautics class at Southwestern Industrial College.

The department of aeronautics of Qing Hua University was established in 1938. Before that, there was an aeronautics group in the department of mechanical engineering.

addadad Brasdon Bostaans

57

Bei Yang University established an aeronautics group in 1935. In 1937, Bei Yang University relocated to Shanxi and merged with the engineerng school of Northeastern University to form the Northwestern Polytech Institute. Furthermore, the department of aeronautics was founded in 1938. In 1946, Bei Yang University moved back to Tianjin. The aeronautics department was also moved back to Tianjin to be included in Bei Yang University.

Xia Men University and Yuan Nan University founded their aeronautics departments in 1944. The aeronautics department at Si Chuan University was established in 1947. The aeronautics department of Beijing Polytech Institute was founded in 1950.

The aeronautics special training course at Southwestern Industrial Special Training School was founded in 1946. Its predecessor was the aeronautics special training course of the Central Industrial Special Training School.

In 1951, in order to meet the need of the vast socialistic contruction, the aeronautics departments and classes in the entire country were reorganized. The aeronautics departments of Qing Hua University, Bei Yang University, Xia Men University, and Northwestern Engineering Institute were merged together to form an aeronautical engineering college in Qing Hua University. In the meantime, the aeronautics departments of Si Chuan University and Yuan Nan University, together with the aeronautics special course at the Southwestern Industrial Training School, were combined into the aeronautics department in Si Chuan University. In 1952, on the basis of the policy and reorganization plan of "emphasizing on the training of industrial construction personnel and a teaching staff to develop special institutions and to reorganize and strengthen comprehensive universities," the aeronautical engineering college of Qing Hua University, the aeronautics department of Si Chuan University, and the

/15

aeronautics department of Beijing Polytech Institute were merged to form the Beijing Institute of Aeronautics and Astronautics.

At the beginning period since its founding, Beijing Institute of Aeronautics and Astronautics had an aircraft department and an engine department. The institute had 365 faculty and staff members. Among them, 115 were teaching members. Among the teachers, there were 24 professors, 20 associate professors, 17 lecturers, and 54 assistants. There were 916 students and 26 graduate students.

Under the care of the Party and the Government, Beijing Institute of Aeronautics and Astronautics was developed rapidly through the hard work of the faculty and staff members. With the exception that two special fields in aeronautical casting and aeronautical forging were reorganized into Northwestern Polytech University in 1957, there were 10 departments and 41 special fields in 1960.

In 1961, in order to thoroughly execute the policy of "adjustment, reinforcement, fulfillment, and improvement," the scale, department, and special field of Beijing Institute of Aeronautics and Astronautics were adjusted. In 1965, there were 8 departments and 26 special fields. There were 4,693 students and 2,983 faculty and staff members. Among them, 1,281 were teaching members.

During the ten year period of chaos, Beijing Institute of Aeronautics and Astronautics was severely destroyed. It stopped accepting new students for five years.

In 1971, it resumed accepting students. However, due to the destruction done by the "Gang of Four," the teaching order was extremely abnormal. The teaching quality was very poor.

After the collapse of the "Gang of Four," especially after the Third Central Committee meeting of the Eleventh Party Congress, Beijing Institute of Aeronautics and Astronautics began to proceed to restore, reorganize, establish and perfect its charters and system. It strengthened the teaching and experiment of fundamental theories. It improved the level of teachers to enrich the first line in teaching. The teaching quality continued to improve. Furthermore, the credit system was practiced since 1978.

-48-

Beijing Institute of Aeronautics and Astronautics currently has 7 departments, 2 fundamental departments, and a total of 12 special fields. The studying system is 4 years.

Aeronautical Materials and Engineering Department

and a second a factor of a factor of a second a factor of a second a factor of a second a s

Aeronautical Materials and Engineering Special Field Aeronautical Radio Engineering Department

Aeronautical Radio Engineering Special Field Aeronautical Automation Control Department

Aeronautical Automatic Control Special Field

Aeronautical Fluid Control Engineering Special Field Aeronautical Engine Department

Aeronautical Engine Special Field

Aircraft Design Department

Aircraft Design Special Field

Aeronautical Engineering Mechanics Special Field Computer Engineering Department

Computer Science and Engineering Special Field Aeronautical Manufacture Engineering and Production Automation Department

Aeronautical Manufacture Engineering and Production Special Field.

In addition to the aforementioned departments and 9 special fields, there are:

Applied Mathematics Special Field

Applied Physics Special Field

Other Inter-discipline Special Fields

The undergraduate program had 3,123 students in 1980. There were 280 graduate students.

The Institute currently has 3,975 faculty and staff members; among them 1,661 are teaching members. Among the teaching staff, there are 39 professors, 166 associate professors, 1,175 lecturers, 10 teachers, and 271 assistants.

Beijing Institute of Aeronautics and Astronautics places its emphasis on scientific research work. It stresses the spirit of breakthrough. In 1958, the faculty and students studied and designed the light weight passenger plane "Beijing No. 1." In the same year, the exploratory rocket "Beijing No. 2" was successfully developed. Later, it successfully developed the automatic control equipment of a pilotless airplane. In recent years, Beijing Institute of Aeronautics and Astronautics has obtained some new accomplishments. Since September of 1977, 69 items of important scientific research accomplishments were obtained. Among them, 48 items obtained national and Beijing accomplishment awards.

Beijing Institute of Aeronautics and Astronautics currently has an aircraft research institute and 4 laboratories in flight control and flight simulation, jet engine propulsion, aerodynamics, and measuring techniques. In addition, there are 6 special field research groups in precision casting, static pressure technique, gold plating hydraulic pressure forming, gyroscope and guidance, astronomical guidance, and laser. Presently, it has 266 full-time research personnel.

The aircraft parking area to be used by students in practice at Beijing Insitute of Aeronautics and Astronautics.



11.

Beijing Institute of Aeronautics and Astronautics has many professors and experts who have accomplished a great deal in teaching and scientific research. Professor Wang Derong has been teaching since the 30's at Qing Hua University and Southwestern /16 Consolidated University. He has been the chairman of the department of aeronautics and raised many good people. In recent years,

the study group headed by Wang Derong resolved the problem of "calculating the vortex axial intensity of the vortex jet aeronautical engine." Professor Shen Yuan was a Ph.D. degree in England. He was the first teacher of the young mathematician Chen Jingrui. Currently, he is the president of Beijing Institute of Aeronautics and Astronautics and the president of the society of aeronautics in China. Professor Ning Huang had taught for many years at the aeronautics department in Qing Hua University. He has studied theories on the combustion of aeronautical engines. He wrote papers such as ((the oscillating combustion of the impulse engine)). Presently, he is the chairman of the Chinese branch of the International Combustion Society. Professor Wang Saozeng, when he was an engineer at an aeronautical engine factory in France, conducted research in the areas of the filling characteristics of cylinder type piston engines and double flow type jet engines. He held a patent in the latter item. After returning to his country, he has been engaged in aeronautical education for a long time. He was chairman of the department and dean of studies. Professor Wang Junkui has an American Ph.D. degree. He was an engineer in an American aircraft factory. He has published a number of papers with considerable standards. After returning to our country, he had been chairman of the aeronautics department, chairman of scientific research, and chief of library. He is presently the chief secretary of the aeronautics society of China and the dean of the second branch campus of Beijing Institute of Aeronautics and Astronautics. Professor Liu Shie has an American Ph.D. degree. He has considerable accomplishments in gyroscope, as well as several inventions in mathematics. He published papers on solving algebraic equations and ((the analysis of longitudinal motion of the aircraft)). Professor Lu Shijia has received a Ph.D. degree in Germany. Her specialty is in theoretical aerodynamics. She was the vice chairman of the international division of the national natural sciences society and the representative of the people in the 1st, 2nd, and 3rd people's congress, Currently, she is the executive committee member of the national association of women. Professor Zhang Guilian's

-51-

specialty is in flight mechanics, In 1949, Professor Zhang published ((potential flow around any cross-section)) in the U.S. In our country, he published such valuable articles as ((problems related to horizontal flight near ground)), ((quasi-aerodynamic elasticity)), etc. Professor Zhang Guilian's paper on "the study of quasi-static elasticity of the dynamic characteristics of an aircraft using the influencing coefficient method" has received the award in the national science meeting in 1978. Professor Zhang Qixran has received an associate doctor degree from the Soviet Union. He has considerable achievements in the theoretical study of and has published over twenty papers in spatial stucture analysis and other overall aspects. Presently, he is the vice secretary of the national mechanical transmission society and the vice chairman of the Beijing Section of the mechanical transmission society. Professor Gao Weibin has considerable expertise in control theory and stability of motion. He has published many papers including ((the absolute stability and the degree of stability of the non-linear control system)).

Beijing Institute of Aeronautics and Astronautics edits and publishes the ((Journal of Beijing Institute of Aeronautics and Astronautics)).

The library currently has over 580 thousand volumes of books, in which over 250 thousand books are in foreign languages. There are 1,765 kinds of periodicals; among them 1,123 are foreign periodicals. Presently, the construction of a new library is under planning.

Currently, there are 45 laboratories with over 14,600 pieces of equipment and instruments.

The institute is equipped with a machine shop, affiliated middle school, elementary school, and kindergarten, and a medical care center. The machine shop has over 240 pieces of equipement It undertakes the duty of teaching and scientific research production.

Beijing Institute of Aeronautics and Astronautics occupies 1,353 acres. The present building area is over 270 thousand square meters. Since the founding of the school, Beijing Institute of Aeronautics and Astronautics has maintained a serious attitude toward studying. Its requirements for the students are very strict. An atmosphere of "hard working and humble, diligent and eager to learn, patriotic, and not afraid to open new areas" was formed. It has trained 17,750 undergraduate students and and 300 graduate students. Most of them have already become the scientific and technological backbones of the aeronautical industry.

> School Anniversary Date: October 25 Current President: Shen Yuan Secretary of Party Committee: Chen Daming

## BEIJING POLYTECH INSTITUTE

School Address: Shiqiao Road, Hai Dian District, Beijing

Beijing Polytech Institute is an advanced technological institute with many disciplines. Its prececessor is Yan An Natural Science Institute.

In September of 1940, in order to meet the requirements of the Anti-Japanese War and to raise technical cadres, Yan An Natural Science Institute was founded. At that time, the institute had 4 departments in chemistry, physics, mining, and biology, as well as a practice machine shop, a glass blowing shop, a chemical laboratory, and a biological laboratory. In 1943, Yan An Natural /1 Science Institute was placed under the leadership of Yan An University.

A view of the campus of Beijing Polytech Institute.



The departments were adjusted to: mechanical engineering, chemical engineering and agriculture. Furthermore, a work study class was also established.

Yan An Natural Science Institute was the first technical institute ever established by the Chinese Communist Party. Li Fuchun, Xu Teli, Li Qiang were presidents at one time or another. Chou Enlai, Zhu Te, Ye Jianyin, Dong Biwu, and Ren Bishi inspected, lectured and reported at the institute. In the speech given by Li Fuchun in the opening ceremony, he pointed out that Yan An Natural Science Institute had a great historical duty, It would have been the prototype of scientific research and education organized by our Party after the new China was born. The objective of Yan An Natural Science Institute in training people was "be a good revolutionary and an expert." In the difficult revolutionary war period, scientific experts and professors who were devoted to the liberation of our country, such as Yun Zigian, Chen Kangbai, Yue Tianyu, Lu Da, etc., arrived at Yan An Natural Science Institute to teach after overcoming many obstacles. They contributed to the building of the institute.

In November of 1945, Yan An Natural Science Institute was moved from Yan An to Zhang Jiakou and became the technical special school for the Jin Cha Ji region. In September of 1946, that school was moved to Jianping. At the end of 1947, it was moved again to Jing Jin. The name was changed into Technical School for the Jin Cha Ji region. Then, there were disciplines in electrical engineering, chemical engineering, factory managements and advanced courses for cadres. her?

After the victory of the Anti-Japanese War, a Jin Cha Ji Regional Northern University was founded in Xingtai. It had a school of engineering. Furthermore, there were disciplines in electrical machinery, iron milling, and chemical engineering. During the revolutionary war, the engineering school had been moved to Changzhi and Luchen in Shanxi.

In 1948, Jin Cha Ji Regional Technical Institute and Jin Cha Lu Yu Northern University School of Engineering merged to form the engineering school of Hua Bei University.

-54-

In 1949, Hua Bei University School of Engineering was relocated to Beijing and became an institute directly affiliated with the Ministry of Heavy Industry in the Central People's Government. In 1950, part of the departments of National Advanced Technical School and the School of Science of Sino-French University were merged into the institute. The faculty and student bodies continued to grow. The building and library equipment were continuously supplied. Departments in machine manufacturing, internal combustion engine engineering, aeronautical engineering, automotive engineering, electrical machinery manufacturing, chemical engineering, iron and steel smelting, and mining were established.

In January of 1952, Hua Bei University School of Engineering changed its name to Beijing Polytech Institute. In the same year, the departments in all the higher education institutes in the nation were reorganized. The 3 departments of aeronautical engineering, iron and steel smelting, and mining were merged into Beijing Institute of Aeronautics and Astronautics, Beijing Steel Institute, and Zhong Nan School of Mining, respectively. After the reorganization, Beijing Polytech Institute had 5 departments in machinery instrument, automobile, radio, and chemical engineering, and 15 special fields. In the early sixties, the institute had developed into departments in engineering mechanics, automatic control, vehicle and power, optical instrument, radio engineering, chemical engineering, and precision machinery, and a teaching and research department in fundamental courses. There were 32 special fields.

During the seventeen years since the founding of the new China to the ten year period of chaos, Beijing Polytech Institute had grown vigorously. The faculty members were getting stronger continuously. Many experts and professors returning from the U.S., Germany, and Russia, as well as from everywhere in our country, came to teach at Beijing Polytech Institute. Among them, Li Linyu, Zhou Faqi, Gao Qingchun, Zhang Yijun, Zhou Lunqi, Chen Jinming, Zhao Jinyi, Ma Shixiu, Wang Xianfu, Lin Hanfan, and Sun Shuben were known scholars with expertise and careful attitude in studying. In 1965, there were 32 professors, 27 associate

-55-

professors, 254 lecturers, and 878 assistants. The total number of faculty members reached 1,191. From 1955, it began to accept graduate students. Until 1966, over 100 graduate students were trained. There were 6,000 undergraduate students. The buildings, books, and experimental apparatus were getting replenished year by year.

In order to improve the quality of teaching, Beijing Polytech Institute has already paid alot of attention to the editing and writing of teaching materials and scientific research work. During the seventeen years prior to the ten year period of chaos, a total of over one hundred million words were written in the form of teaching materials. Many of the teaching materials were welcomed and praised by the higher education institutions in our country. ((Advanced Mathematics Textbook)), written by Professor Chen Jinming was adopted by many engineering schools in the country. The faculty, in the meantime, had been actively engaged in scientific research parallel to their excellent teaching work. Over one thousand items in scientific research topics had been carried out and important scientific research results were obtained.

During the ten year period of chaos, Beijing Polytech Institute was seriously damaged. It stopped accepting students for six years. Student recruiting resumed in 1972.

After the "Gang of Four" was crushed, Beijing Polytech Institute was gradually restored and developed. Under the leadership of the accurate Party line, the revolutionary tradition and the excellent school atmosphere were carried forward. The quality in teaching was continuously improved.

Presently, Beijing Polytech Institute has 10 departments. Flight Vehicle Engineering Department Automatic Control Department Vehicle Engineering Department Engineering Optics Department Electronic Engineering Department Chemical Engineering Department Mechanical Engineering Department Mechanics Engineering Department Computer Science and Engineering Department Industrial Management Engineering Department

In addition to the aforementioned departments, an independent fundamental science division was established. The institute has 34 special fields.

In 1980, the school had 3,100 undergraduate students. The current system is 4 years. In 1978, it began to resume accepting graduate students. Presently, it has 126 graduate students. The learning period is either 2 years or 4 years. The school emphasizes the development of students in morality, wisdom, and body. The education of the theories of Marxism and Mao Tsetong's thought, as well as the teaching of fundamental courses in mathematics, physics, and chemistry, is reinforced. Sports and extracurricular activities are actively encouraged. A large number of students, who are good in all three areas, have emerged. Some of them were praised as the shock workers and "San Hou" students of the new long march in Beijing and in the nation. Some second year students wrote relatively high level papers. Student organizations such as the Student Union, Arts Group, Writing and Painting Association, and Photography Group, are very effective in the learning, living, and culture activities of the students.

Beijing Polytech Institute has 53 laboratories. It owns advanced equipment such as electronic computers, a pulse x-ray system, high accuracy thermal differential analysis apparatus, x-ray diffraction apparatus, electrical hydraulic servo universal apparatus, and a high speed camera. In addition, many pieces of experimental apparatus were developed by the teachers. They have received the praises by domestic and foreign scholars many times. The institute has a flight vehicle research institute, vehicle body research laboratory, engine laboratory, optical technology laboratory, and optical machinery laboratory. There are over 300 teachers primarily engaged in scientific research work. In 1980, the institute had undertaken over 130 items of national research tasks. In October of 1980, Beijing Polytech Institute had 3,580 faculty and staff members. Among them, 1,450 were teaching members. In the teaching staff, there were 40 professors, 220 associate professors, 930 lecturers, 250 teachers, and 10 assistants. In recent years, the faculty has been working very hard and they have accomplished significantly in teaching and research. The teachers are effective in all aspects of teaching. Young and middle age teachers grow rapidly. A large number of academic leaders and backbones in teaching and research have emerged. In recent years, there have been over 40 scholars from the institute presenting papers and exchanging knowledge in academic conferences and journals.

In recent years, Beijing Polytech Institute also obtained new development in the area of scientific research, and new achievements were reached, for example, development in the areas of modern control theory, combustion theory, explosion mechanics, transfer function, observation, measurement, and remote photographic techniques, microwave and radar technology, control and guidance technology, electronic optical technology, organic synthesis technique, and large scale planetarium. In March of 1978, during the national science conference, Beijing Polytech Institute obtained 33 scientific accomplishment awards. In the Beijing scientific meeting, it received 39 scientific research accomplishment awards. It also received 17 awards in technical accomplishments from the relavant department in the State Council. The study on "diesel engine wall attached flow combustion system" received a National Invention Award in 1980.

/18

In order to improve the teaching quality and academic level of the School, Beijing Polytech Institute, in recent years, has sent over 30 teachers and graduate students to higher education institutions and scientific research organizations for advanced study in the U.S., Japan, England, France, Germany, Canada, Austria, and Switzerland. In the meantime, experts and professors from the U.S., Japan, England, France, Germany, etc. were invited to lecture and visit the institute to carry out academic exchange.

For thirty years, Beijing Polytech Institute has trained over 19,000 special experts for the nation. Most of them became the backbones of science and technology in various areas.

-58-

The publications include ((Journal of Beijing Polytech Institute)), etc.

The library has over 700 thousand books. There are approximately 4,000 periodicals. Presently, the school is building a six story library building occupying 13,000 square meters.

The institute, a machinery factory, an electric factory, and an optical workshop to serve the needs of student practice and scientific research. There are affiliated television college classes and night college classes. Furthermore, it is actively involved in the preparation of a correspondence education organization. In addition, there is an affiliated middle school, elementary school, kindergarten and medical center.

Beijing Polytech Institute approximately occupies 1,145 acres. The school building area is approximately 270 thousand square meters.

> Current President, Secretary of Party Committee: Su Qianyi

## BEIJING STEEL INSTITUTE

School Address: Xueyuan Road, Hai Dian District, Beijing

Beijing Steel Institute was founded on April 22, 1952.

The steel industry in China was very backward before the Liberation. After the founding of the new China, in order to raise people with specialties in metallurgy to meet the needs of the socialist economic construction, the Central People's Government decided to establish a steel institute in 1952. In April of the same year, the departments of metallurgy and mining of Bei Yang University, department of metallurgy of Tangshan Jiaotong University, department of metallurgy of Shanxi University, department of mining and smelting of Hua Bei University School of Engineering were merged in Qing Hua University to officially form the steel institute. At that time, there were 5 departments in mining, metallurgy, machinery, metallography and thermal treatment, and metal

-59-

pressure processing. The school system was 4 years. There were 350 students and 49 full-time teachers. Some famous professors and experts in mining and metallurgy, such as Zhang Wenqi, Wei Shoukun, Lin Zongcai, Zhu Jia, Zhang Shouhua, Chen Dashou, Lu Hurnyuan, Tong Guangxu, Lin Ziyang, and Yang Shangzhou were teaching at the institute. In the meantime, the Government also sent some professors and teachers in mathematics, physics, chemistry, mechanics, and foreign languages. Later, some famous scholars returning from abroad, such as Ke Jun, Xiao Jimei, Zhang Xingqian, Ma Ruzhang, and Wang Run, were added as professors. In addition, a number of experienced engineering technical personnel, such as professors Xu Baosheng and Qian Zhenpeng were also dispatched from research institutes and factories.

In August of 1953, the steel institute was moved to the new address at Xueyuan Road, Hai Dian District, Beijing from Qing Hua University. The name was designated as Beijing Steel Institute. In 1954, the school system was changed to 5 years. In 1956, it began to accept graduate students. In the same year, the department of physics and chemistry was established. It had two special fields in metallics physics and metallurgical physical chemistry. The school system was five and a half years.

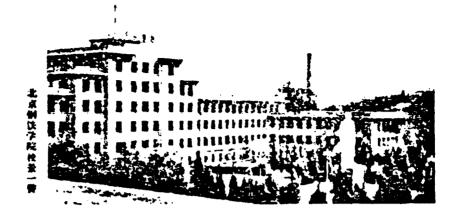
Until early 1966, the institute had 12 special fields in mining, mine selection, steel and iron smelting, metallurgy, metal pressure processing, metallurgical machinery, mining machinery, metallurgical furnace, casting, metal physics, metallurgical physical chemistry, and industrial automation. The æademic territories were expanded to mining, iron and steel, rare metal, machinery, and automation. The number of teachers reached over 800. The undergraduate students reached over 5,000. In addition, it accepted 120 foreign undergraduate and graduate students.

During the ten year period of chaos, Beijing Steel Institute was seriously damaged. It stopped accepting students for as long as 5 years. It resumed accepting students in 1972. Until 1976, it had recruited 5 classes of students in a 3 year system.

/19

12 3

A view of Beijing Steel Institute.



After the "Gang of Four" was crushed, Beijing Steel Institute established the normal teaching order through restoration and reorganization. The quality of teaching was significantly improved. The school system was changed to 4 years. In 1978, there were special fields in metal corrosion, electronic computer science, automated metallurgical instruments, manufacture of machinery, fluid transmission and control, applied mathematics, physics, chemistry, mechanics, management engineering, and scientific foreign language. Furthermore, from 1978, it began to accept 2 year and 4 year graduate students.

Beijing Steel Institute is under the control of the Ministry of Metallurgical Industries. Presently, it has 8 departments, 1 division, and 23 special fields.

Mining Department

Mining Engineering Special Field

Mine Selection Special Field

Mine Machinery Special Field

Metallurgical Deparrment

Iron and Steel Smelting Special Field

Metallurgical Thermal Treatment and Energy Utilization Special Field

Casting Special Field

Metallic Materials Department

Metallic Materials Special Field

Metal Pressure Processing Department

Metal Pressure Processing Special Field

Machinery Department

Metallurgical Machinery Special Field Machinery Manufacturing Technology and Equipment Special Field Fluid Transmission and Control Special Field Automation Department Industrial Automation Special Field Electronic Computer Science Special Field Automated Metallurgical Instrument Special Field Physical Chemistry Department Metal Physics Special Field Metallurgical Physical Chemistry Special Field Metal Corrosion Science Special Field Management Engineering Department Management Engineering Special Field Fundamental Courses Division Physics Special Field Chemistry Special Field Mechanics Special Field

Applied Mathematics Special Field

Scientific Foreign Language Special Field

In 1980, there were 3,628 undergraduate students and 268 graduate students. In addition, there were over 10 foreign students.

The institute currently has 2,954 faculty and staff members. Among them, 1,164 are teachers. Among the teachers, there are 32 professors, 254 associate professors, 732 lecturers, 17 teachers, and 129 assistants. There are 930 engineers, technicians, and technical workers in laboratories and factories.

In order to meet the requirements in training teachers and guiding graduate students, in recent years, Beijing Steel Institute has retained nearly 30 excellent scientists from here and abroad as part-time professors. Among them, there are the vice ministers of metallurgy Lu Da nad Zhou Chundian; the famous metal physicist, committee member of the department of Chinese Academy of Sciences, and vice president of Chinese Technical University Qian Linzhao; chief of Solid State Research Institute, Ge Tingsui; vice president of Chinese Academy of Sciences Shengyang Institute and member of Swedish Royal Engineering Academy Guo Kexin; dean of Metal Research Institute Shi Changxu; dean of Metallurgy and Chemical Engineering Institute Guo Musun; associate dean Chen Jiayun; dean of Aeronautical Materials Institute Yan Mingguo, and chief engineer of Material Protection Institute Sheng Zengzou.

In October of 1980, the representatives from Artong University in West Germany visited the twenty roller rolling mill in the pressure processing laboratory at Beijing Steel Institute. This machine was designed by the faculty at Beijing Steel Institute. It is capable of milling  $2-3\mu$  of extremely thin belts.



The institute has a correspondence department which is actively developing correspondence education. Between 1956-1966, it accepted over 2,000 students. Over 400 of them graduated. Currently, there are six correspondence stations or correspondence branches in the greater regions in the northeast, north, east, and middle south areas. There are over 500 students.

Beijing Steel Institute has always been serious about scientific research. At the present moment, it is undertaking the scientific research tasks in metallurgical industries and machinery industry department each year. In the national science meeting held in 1978, 24 items were given excellent scientific research accomplishment awards. 35 items received excellent research accomplishment awards in the science meeting of the Ministry of Metallurgy. 8 items received prize money awarded by the Ministry of Metallurgical Industries. The first satellite and first intercontinental carrier missile ever launched by our country used new materials developed by the institute. It has also contributed to the development and total utilization of mining resources of iron and other co-existing colored metals, and the development and application in electroslag melting, continuous casting, planet milling machine, diagonal rolling forming, rolling of thin ribbons, fracture mechanics, improvement of mining method and machineries, electrical measurements of metallurgical equipment, super alloys, effect of rare earth in iron and steel, metal corrosion mechanism, and metallurgical physical chemistry theory. Among them, the flying clipper for the iron mill and the theory of Baiyin body received national scientific and technical awards. The paper on the study of high temperature super alloys obtained the best paper award in an international meeting. The laboratories and factories are able to produce high purity single crystal silicon, magnetic alloys, 2-3 micron thick super thin metal ribbons, precision cast parts, and high accuracy strain plates. The accuracy and stabilities of the transducers and electronic scales for the metallurgical factories and the oxygen probes for solid electrolytes have reached advanced levels in the country. In recent years, the institute has made considerable progress in the exploration of the contribution of ancient Chinese metallurgical techniques to human culture.

Presently, the institute has 4 research institutes in mineral engineering, metallurgy, metallic materials, and mechanical engineering. In addition, it has a material structure analysis center, chemical analysis center, electronic computer center, and factories for materials smelting and processing and instrument and equipment fabrication for scientific research. In recent years, Beijing Steel Institute has intensified its cultural exchange activities with famous universities here and abroad. On one hand, teachers have been selected for advanced studies, or for attending academic meetings at other universities. On the other hand, famous scholars, either in the country or from abroad, have been invited to lecture in the institute. Through these activities, the level of teaching and research has been raised.

In recent years, the equipment for teaching and research has been improved. Currently, it has advanced equipment such as a large electron microscope, a scanning electron microscope, electronic computers, an x-ray diffraction apparatus, an optical grating spectrograph, a Mosshauer spectrograph, a vacuum induction furnace, a zone melting single crystal furnace, an electroslag furnace, an arc furnace, and two roller, four roller, and twenty roller milling machines. In addition, there are language laboratories and audiovisual education centers equipped with complete sets of color tape recorder and player. It is capable of providing close circuit television education.

The publications include the ((Journal of Beijing Steel Institute)).

The library currently has over 700 thousand books and 1,427 periodicals. Among them, 897 are foreign periodicals.

Beijing Steel Institute occupies 730 acres. Presently, it has 200 thousand square meters of building space.

Since its founding in 1952, it has raised over 18,000 college students, 170 graduate students, and over 120 foreign students. The total number is 20 times more than the trained metallurgical people in the 60 years before the founding of Beijing Steel Institute. In addition, the institute has held old cadre classes 5 times which were operating on a three year system. There were over 120 graduates. It also held various advanced courses and short-term classes which trained over 4,600 people. It has educated over 2,000 correspondence students.

-65-

. . .

The metallurgical technical people raised by Beijing Steel Institute are all over the place in the management organizations, schools, and scientific research units in the areas of mining, metallurgy, materials, and machinery. Many of them have already become the backbone in metallurgy. Quite a few of them are responsible persons and technical leaders in the metallurgical bureaus in provinces and cities, as well as large scale factories (mines). They are also the responsible persons in metallurical research institutes, laboratories, schools, departments, and teaching and research offices.

Beijing Steel Institute is becoming a higher education technical institute with advanced levels in metallurgy and materials science through hard work. It will contribute more to the Four Modernizations of our nation.

> School Anniversary Date: April 22nd. Current President: Zhong Wenqi. Secretary of Party Committee: Liu Shaohui.

### BEIJING CHEMICAL ENGINEERING INSTITUTE

School Address: Hepingli, Xicheng District, Beijing

Beijing Chemical Engineering Institute was founded on September 15, 1958. It was under the leadership of the Ministry of Chemical Engineering.

During the initial stage after the founding of the school, there were three departments and 12 special fields. They were: the Inorganic Chemical Engineering Department which had three special fields in engineering of inorganics, inorganic salts and light isotopes; Organic Engineering Department which had six special fields in organic synthetic chemistry, plastics engineering, synthetic rubber engineering, synthetic fiber engineering, defense chemistry and high energy fuels; and Chemical Engineering Machinery Department which had three special fields in chemical engineering machinery, automatic control of chemical engineering production processes and synthetic material processing machinery.

Before the 10 year period of chaos, the institute was built to some scale. The teaching order was stable. The quality of teaching was continuously improving. There were nearly 3000 students.

During the 10 year period of chaos, Beijing Chemical Engineering Institute was severely damaged. It stopped accepting students for four years. In November 1969, the entire faculty and staff members were sent to the "May 7th" School in Zhumadian, Henan, to perform hard labor. On December 15, 1970, Beijing Chemical Engineering Institute was re-assigned under the leadership of the city of Beijing through the approval of the State Council. The faculty and staff members gradually returned to the campus. In March 1971, it began to accept students. Four special fields were abolished. On October 15, 1971, it merged with Beijing Chemical Fiber Engineering Institute and the name remained "Beijing Chemical Engineering Institute".

After the "Gang of Four" was crushed, the chemical engineering institute returned to a healthy growth path. In July 1973, the Beijing Chemical Fiber Engineering Institute was restored. It was gradually removed from the chemical engineering institute.

A view of the Beijing Chemical Engineering Institute

Since 1977, the new students were switched to a four-year system. In 1978, it began to accept the first class of graduate students. The learning period is either two or four years.

Presently, there are five departments and 10 special fields: Chemical Engineering Department

Chemical Engineering Special Field

Chemical Engineering Analysis Special Field

Macromolecular Chemical Engineering Department

Macromolecular Chemical Engineering Special Field Macromolecular Material Engineering Special Field

Chemical Engineering Machinery Department

Chemical Engineering Machinery Special Field Rubber Machinery Special Field

Plastic Machinery Special Field

Chemical Engineering Corrosion and Protection Special Field Chemical Engineering Automation Department

Chemical Engineering Automation and Instrument Special Field Chemical Engineering Management Engineering Department

Chemical Engineering Management Special Field.

In 1980, there were 1133 special field students and 52 graduate students.

The institute presently has 1531 faculty and staff members; among them 603 are teachers. There are three professors, 22 associate professors, 419 lecturers, 24 teachers and 135 assistants to the teachers.

In order to strengthen the teaching of fundamental courses, the fundamental course division was restored in 1977. In addition to

undertaking the duty of teaching fundamental course, it also held classes for teachers in mathematics, physics and physical chemistry in 1978 and 1979.

Beijing Chemical Engineering Institute is a higher education technical school training various special experts in chemical engineering, chemical engineering technology, chemical engineering machinery and chemical engineering automation. The emphasis of the institute is placed on the synthesis, processing and machinery in the area of high polymers. Among them, the plastic machinery special field was established first. It has been developed more rapidly. It has reached a certain standard.

In recent years, the institute has achieved significant results in scientific research. Currently, there are five laboratories in photo-sensitive materials, chemical engineering, macromolecular materials, chemical engineering analysis and chemical engineering data bank. In the national science meeting in March 1978, there were seven items receiving prizes. Among them, the guided sieving plate group and the horizontal shaking centrifuge were reviewed as the advanced groups. In the recent two years, 23 scientific accomplishments passed evaluation. Among them, the horizontal shaking centrifuge, the catalyst for fats and the mordant for ammonium salts received national invention awards. The paper on the study of the horizontal shaking centrifuge was presented in Ireland at an international meeting. It has received the attention of the scholars attending the meeting. In 1978, the school established an academic committee. Later on, eight study groups were formed and three seminars were held. Seven domestic and foreign scholars were invited from the U. S., Japan, Canada and Germany to give lectures. The institute received foreign scholars, expert visits and briefings and seminars over 20 times. Approximately 30 backbone teachers have been sent to foreign countries to study and to attend technical meetings.

The institute currently has 28 laboratories. It is capable of offering all the laboratory courses. In recent years, a number of pieces of equipment have been replaced, including electronic computers, X-ray diffraction apparatus, infrared spectrometer,

-69-

liquid chromatograph, gas chromatograph, atomic absorption apparatus, flow variation device and plastization apparatus. In addition, there is a set of television video recording and playing equipment.

The library presently has over 400,000 books, of which over 90,000 are in foreign languages.

The publication is (Journal of Beijing Chemical Engineering Institute).

The institute has an affiliated factory, in which there are mechanical processing, thermal processing, mechanical sealing, plastic material forming processing, maintenance and chemical engineering workshops, serving needs in teaching and research. It is capable of producing products such as the model LH-II vulcanizer, the electric edge suction device and the 152 and 212 mechanical sealers. The Associated Night College resumed accepting students in 1979.

Beijing Chemical Engineering Institute occupies 293 acres. The building area is 95,000 square meters. Currently, it is planned to build a chemical engineering laboratory building, an audiovisual education building, a student dormitory and faculty quarters. The government has already approved the purchase of 80 acres of land.

Since its founding, Beijing Chemical Engineering Institute has trained over 8498 people in chemical engineering for the country in 22 years. The institute is improving its teaching quality according to the needs in the construction of our country so that it is capable of contributing more to the Four Modernizations.

Party Committee Secretary: Ma Fongtin

## BEIJING POST AND TELECOMMUNICATIONS INSTITUTE

School Address: Yuannan Road, Hai Dian District, Beijing

Beijing Post and Telecommunications Institute is a technical /23 school established on the basis of the two special fields in telephone and telegram communication and radio communication and broadcasting in the telecommunications department at Tianjin University as well as the telephone and telegram special field at Chongqing University. Its preparation began in October 1953. In February 1954, the preparation office of Beijing Post and Telecommunications Institute was set up. 104 divisional cadres were reassigned from the Ministry of Post and Telecommunications and other postal and telecommunications organizations to the office. On July 20, 1955, Beijing Institute of Post and Telecommunications was officially established.

In August, 1956, the institute was relocated to the new address at Yuannan Road in the Hai Dian district.

In the initial stage after the founding of the institute, there were 3 departments: Wire Telecommunications Engineering Department which had a special field in telephone and telephone and telegraph; Radio Communication Engineering Department which had a special field in radio communication and broadcasting; and Engin eering Economics Department which had special fields in postal and telecommunication economics and in organization. The entire institute consisted of 16 teaching and research groups, 10 laboratories and a practice factory. There were a total of 290 faculty and staff members; among them 119 were teachers.

In 1956, the Correspondence Department was established. Moreover, the evening college was set up in the Beijing area. The engineering economics special field program was changed to a special class for cadres.

In 1958, the Fundamental Course Department was established. Furthermore, there were special fields in wire telecommunication design and fabrication as well as in radio design and fabrication. The undergraduate system was changed to five years and the correspondence students to six years.

-71-



Part of the view of the Beijing Post and Telecommunications Institute Campus

In April 1959, Beijing Telecommunications College and its affiliated Technical Department were merged into the Beijing Post and Telecommunications Institute. In the first institutional affairs committee meeting held after the merger, it was decided that April 1st is the anniversary date for the institute.

In August 1960, the Technical Department was abolished. The Fundamental Course Department moved into the office location of the Technical Department. In October of the same year, the Post and Telecommunications Technical University was merged into Beijing Post and Telecommunications Institute. In addition, it began to accept three-year graduate students.

On September 20, 1963, a portion of the students at Changchun Institute of Post and Telecommunications were transferred into Beijing Post and Telecommunications Institute.

In 1966, the number of undergraduate students had reached 4645 and faculty and staff members, 2217.

In the 10 year period of chaos, without exception, Beijing Post and Telecommunications Institute was seriously destroyed. It stopped accepting new students for five years.

In October 1970, Beijing Post and Telecommunications Institute was changed into Beijing Postal and Telecommunication Engineering College. There were four special fields in wire communications, wireless communications, electronic devices and communication power supply. The school system was either two or three years, depending on the specific requirement of the special field. In 1973, the name of Beijing Post and Telecommunications Institute was restored. There were three departments (Wire Communications Department, Wireless Communications Department and Postal Machinery Department) and two divisions (Fundamentals and Correspondence). A number of special fields were offered in carrier wave communication, digital communication, computers and communication, microwave communication, wire communication techniques (including television), machinery in post and telecommunication (postal and telecommunication), semiconductor devices, international communications and communication power supply. The system was three years.

After the "Gang of Four" was crushed, the undergraduate system was changed to four years in 1977 along with the reform of the school system by the government. In the meantime, it resumed accepting foreign students. In 1978, the institute resumed recruiting two to three year graduate students.

In the second half of 1979, the cadres in charge of teaching were assigned to the preparation of a branch campus of Beijing Post and Telecommunications Institute. In the meantime, in the original Correspondence Division, Beijing Post and Telecommunications Correspondence Institute was restored. It was under the leadership of the Ministry of Post and Telecommunications directly. At the same time, in order to suit the needs of the modernization of postal and telecommunication management, the special field in postal and telecommunication management engineering was restored in 1979. It began to recruit students in 1980.

Currently, Beijing Post and Telecommunications Institute has four departments, one fundamental division and six special fields.

First Department

Electronic Computer and Communications Special Field Telecommunications Engineering Special Field

Second Department

Radio Engineering Special Field

Third Department

Postal and Telecommunication Machinery Special Field

Post and Telecommunications Management Engineering Department Post and Telecommunication Management Engineering Special Field

Fundamentals Division

Applied Physics Special Field

In 1980, there were 2180 undergraduate students, 60 graduate students and 12 foreign students.

The entire institute currently has 1980 faculty and staff members; among them there are 678 teaching and research personnel and 230 engineering and technical personnel. In the teaching and research staff there are seven professors, 76 associate professors, 448 lecturers, 17 teachers and 130 assistants.

In the area of scientific research, in recent years alone, 150 technical papers have been presented and published in various professional journals. Over 40 research projects have been completed. Nine projects have received national science meeting awards. Eight projects have been given awards by the Science Committee of Beijing. Among them, a color television light matching device jointly developed with Beijing Radio Institute, a discrete multiple channel scattered terminal system, a 2GHZ microband microwave device using complete solid state integration technology, a 1.7 GHZ medium frequency amplifier, a multi-point data display and an automatic newspaper distribution machine have reached advanced levels. The 4800 byte/sec echo modulation digital transmitter developed for the Geophysics Institute was successful in transmitting earthquake data signals. Theoretically, the interaction between each pair of echoes was presented for the first time. The paper (overall reactance = general theory on opposing end networks) published by Professor Liu Zemin has received a lot of attention in the academic circles in the country. The "electrical contact solid lubricant" developed by Associate Professor Peng Rudao, et al. has good lubricating characteristics and anti-corrosion property against vulcanization. It has a great effect on the reliability of communications equipment and other electronic devices and filled a blank in the lubricating materials for electrical contacts in our country. The

quality control work (the shifting control diagram) by Associate Professor Zhang Gonshu and the strong electrical interference theory by Associate Professor Gao Xiaogang were also received with a lot of attention by the academic communities and related departments in our country.

Ĩ

<u>}</u>

Beijing Post and Telecommunications Institute has many well known scholars and professors. Vice President, Professor Ye Peida (committee member of the National Political Committee), has studied the "design of relevant components in the 960 channel model II microwave device", "communications in the HOl circular waveguide" and "laser communications". He has published technical papers in the areas of electro-acoustics, radio transmission and receiving, microwave technology and communications. He has written many teaching materials in microwave theories and books in laser communications theories. Professor Cai Changnian, who is the chairman of the information special field in the Chinese Electronics Society, vice chairman of the editing committee and the vice president of the institute, has reached certain achievements in the areas of information science and data transmission. Furthermore, he has published papers in "quantified noise in multi-channel language", "discussion on modulation" and "modulation of returned signals". In the 1978 National Science Meeting, he was rewarded as an advanced worker. Professor Zhou Jiongnie has expertise in information theory. He has been involved in scientific researches in "color television", "diagrammatic statistical analysis", "scattering communications", "digital network synchronization", "satellite communications", etc. He is the author of the paper "maximum information of television signals" and the book entitled "Introduction to Modern Communications Systems". Presently, he is writing books in the area of modern information theory. He was a member of a group which won the collective advance award in the 1978 National Science Meeting.

In recent years, the institute has established a research instiitute and a technology center. The research institute has a yournal editing room which is responsible for the editing of the isournal of the Beijing Post and Telecommunications Institute (not which is periodically for the time being).

-75-

In order to strengthen international academic exchanges, to absorb advanced foreign experience and to improve the standards of the teachers, the institute has sent 30 people to study abroad. In the meantime, 10 foreign scholars and experts were invited to give lectures and seminars at the institute.

Since the Gang of Four was crushed, teaching conditions and equipment have been improving every year. An electronic teaching building has been built. The experimental teaching television station has been rebuilt. In addition to the original computer center, a new one was built. It is equipped with the medium size FELIXO-512 computer. Moreover, the institute has 25 laboratories. It owns teaching instruments and equipment valued at over 17 million yuan. They include color video recording equipment, WM-50 carrier wave voltage measuring device, ME617A and ME417A microwave testing devices, LD-1 time delay and attenuation testing device, multi-purpose oscilloscopes and counters. These instruments and equipment are the necessary conditions in training the students with hands-on experience, as well as in improving the teaching quality and the research standards.

The library currently has 310,000 volumes of books. Among them, there are over 260,000 Chinese books and 50,000 foreign books. In addition, there are over 1700 periodicals of which over 900 are foreign.

The practice factory at the institute has a metal workshop and an instrument workshop. In addition to student practice and developmental fabrication, they also undertake a small portion of the production duties for our country. The institute has an affiliated printing shop which prints the teaching materials and information for the institute.

Beijing Post and Telecommunications Institute occupes 545 acres of land. The present building area is 140,000 square meters.

> School Anniversary date: April 1st Current President: Meng Guimin Secretary of Party Committee: Song Teren

/25

BEIJING INSTITUTE OF AGRICULTURAL MECHANIZATION

School Address: Qinghua East Road, Hai Dian District, Beijing

Beijing Institute of Agricultural Mechnization was founded in 1952. It was established by merging the Machine Plowing School of the Ministry of Agriculture, the Agricultural Machinery Training School, the Agricultural Machinery Department at Beijing Agriculture University and the College of Agriculture in the Plain Pro-In the initial stage, the name of the school was Institute vinces. of Mechanized Agriculture. The school was located at the old Machine Plowing School in Shuang Bridge which is in the east suburb of Beijing. It was under the jurisdiction of the Ministry of Agriculture. It has three departments in agriculture mechanization, mechanized agriculture and socialist agricultural management. The school system was four years. In addition, there were four affiliated two-year special training classes in agricultural mechanization, mechanized livestock farming, mechanized agriculture and socialist agricultural management.

According to a decision made by the Ministries of Agriculture and Education in 1953, the Agriculture Department and the Agriculture Special Field were merged into the Northeast Agriculture Institute. In the meantime, the name of the school was changed to Beijing Institute of Agricultural Mechanization. At just about this period, it was moved to the newly built campus on Qinghua East Road. In 1954, the institute was switched under the jurisdiction of the Ministry of Education. In the same summer, after the graduation of the students from the special fields in agricultural mechanization, agriculture, livestock farming and agriculture management, the special fields were abolished. In the same year, a 3000 Chinese acre affiliated farm was set up near Sha He Village in the north suburb of Beijing. It was used as the base for teaching, research and production. In 1955, according to the decision of the Ministry of Education, the Department of Agricultural Management was merged into Beijing Agriculture University. In the meantime, the Department of Agricultural Mechanization Education was added. It

-77-

began to accept new students in order to train teachers for middle level schools for agricultural mechanization. In 1956, a graduate student class was established. In 1957, the institute was switched back to the jurisdiction of the Ministry of Agriculture. The Department of Agricultural Mechanization Education was abolished in 1958. In the fall of the same year, due to the slander by Kang Sheng, the entire faculty and students were sent to the field for labor reform in the areas of Changge, Henan; Xiaogang, Hubei; Xushui, Hebei; and the suburb of Beijing. Moreover, the affiliated Sha He Farm was transferred to the Bureau of Agriculture of Beijing.

In order to satisfy the needs of the development of agricultural mecahnization in our country, in the spring of 1959 the institute added the Department of Design and Manufacturing of Agricultural Machinery (with two special fields in design and manufacturing of agricultural machinery, and design and manufacturing of tractors), Department of Electrification of Agriculture (with two special fields in electrification of agriculture and application of electronics in agriculture), Department of Farmland Irrigation (with a special field in irrigation of farmland). These departments began accepting students in the same year In the same fall, the Agriculture Ministry's School for Tractor Station Cadres was merged into Beijing Institute of Agricultural Mechanization and became an affiliated cadre training department. It has trained management cadres in agricultural machinery for the cities and provinces in the country. In 1960, the undergraduate program was changed to five years. In 1961, the Correspondence Department was established. In 1962, the special field in application of electronics to agriculture was eliminated. Students were asked to join the special field in electrification of agriculture. In 1963, the institute was switched under the jurisdiction of the 8th Machinery Ministry. In 1964, Beijing Institute of Agricultural Mechanization was planning to set up its Henan and Zhongnan branch campuses at Boai Farm in Boai Xian, Henan and Dongting Farm in Changte Xian, Hunan. In the same year, on the basis of the county experimental field in Tong Xian just outside Beijing, a 15,000 acre mechanized experimental farm was built by combining the production teams in the

-78-

neighboring communes. It was used as the base for teaching, research and production.

Up until 1966, Beijing Institute of Agricultural Mechanization has already developed into four departments, six special fields, two branch campuses, one cadre training department and one correspondence department. There were over 3100 undergraduate students and 50 foreign students.

During the 10 year period of chaos, the teaching and scientific research work at Beijing Institute of Agricultural Mechanization was basically stagnant. Teaching equipment and faculty members were lost to a serious level. In July 1969, the officials and faculty members were sent to the May 7th School at Luoshan in In October, the school was moved out of Beijing. Over Henan. 4000 teachers and students were scattered to perform labor work at the Boai Farm in Henan, the Internal Combustion Engine Factory in Shandong Weifang, and the working sites of the Railroad Army. In June 1970, the institute was relocated into the original site of Southwest Agriculture Institute in the Beipei District in the city of Chongqing in the province of Sichuan. The name of the school was changed first to Sichuan Agriculture Institute and then to Chongqing Agricultural Machinery Institute. In the same year, the Ministry of Eighth Machinery was merged into the Ministry of First Machinery. The institute was placed under the jurisdicition of the Ministry of First Machinery. Furthermore, three special fields in internal combustion engine, design and manufacturing of hydraulic machinery and manufacturing and repair of agricultural machinery were set up. In 1972, the three special fields in agricultural mechanization, design and manufacturing of tractors and design and manufacturing of agricultural machinery resumed recruiting students. 180 students were accepted. The school system was three years. In 1975, the institute was moved from Beipei in Chongqing to the city of Xintai in the province of Hebei. The name was changed to Haubei Agricultural Mechanization Institute. The 180 students accepted were sent to Chongqing University and Sichuan Engineering Institute.

-79-

After the "Gang of Four" was crushed, according to the needs of modernizing constructions, Haubei Agricultural Machinery Institute added the special fields in agricultural construction and environmental control. In 1979, it was under the jurisdiction of the Ministry of Agricultural Machinery. In May of the same year, with the approval of the State Council, it was permitted to move back to the original place in Beijing. Beijing Institute of Agricultural Mechanization was restored.

The restoration and reorganization work at Beijing Institute of Agricultural Mechanization is actively underway.

Currently, it has four departments and nine special fields. The school system is four years.

Agricultural Mechanization Department

Agricultural Mechanization Special Field Agricultural Machinery Design and Manufacturing Department Agricultural Machinery Design and Manufacturing Special Field Tractor Design and Manufacturing Special Field Agricultural Machinery Repair and Construction Special Field Internal Combustion Engine Design and Manufacturing Special Field

Farmland Irrigation Department

Farmland Irrigation Engineering Special Field Irrigation Machinery Design and Manufacturing Special Field

### AGRICULTURAL CONSTRUCTION AND ENVIRONMENT ENGINEERING SPECIAL FIELD

AGRICULTURAL ELECTRIFICATION DEPARTMENT Agricultural Electrification Special Field

In addition, it is currently planned to set up three special fields in agricultural mechanization management engineering, agricultural electric automation and applications of computers.

In 1980, there were 980 undergraduate students.

It has already resumed studies on the graduate level. Currently, there are 27 graduate students.

The institute currently has 1322 faculty and staff members; among them 507 are teachers. Among the teachers, there are seven full professors, 35 associate professors, 410 lecturers, 27 teachers and 28 assistants.

Beijing Institute of Agricultural Mechanization is a higher education institution aimed at training people in agricultural mechanization and agricultural engineering based on engineering sciences. It is combining engineering with agriculture. Before 1966, it was developing steadily. Both teaching and research had obtained significant results. It had trained 7159 undergraduate students, 231 special students and 112 graduate students for our country. Most of them have already become the backbone in the agricultural mechanizing construction of our country. The various training classes and the Correspondence Department also had a great effect on the training of management and technical personnel in the area of agricultural machinery.

Since its founding to 1966, Beijing Institute had completed 99 research topics; among them 42 had relatively outstanding accomplishments. For example, Professor Zhen Techao studied the design of the curvature of a plow, the earth plowing curve method. It was an innovative approach in the 60's and was adopted by workers in agricultural machinery design. Professor Yu Xinfu carried out research on the strength of agricultural machinery and obtained good results. The experimental result obtained by the relevant

-81-

teachers in the Agricultural Mechanization Department regarding the burning of Daging crude oil in the east in Red-54 tractor has received an award in the National Science Meeting.

In order to further strengthen the scientific work, seven laboratories are currently under construction: agricultural mechanization, agricultural machinery repair, systems engineering, development and utilization of agricultural energy resources, agricultural machinery, pedological dynamics and agricultural electric automation.

In recent years, Beijing Institute of Agricultural Mechanization has sent its faculty members to investigate the agricultural education and agricultural engineering in many countries, such as the United States, England, West Germany, Cameroon, Malaysia, Italy and Austria. Furthermore, some teachers were sent to related higher learning institutions in the United States, Australia and Yugoslavia. In addition, it has established exchange programs with some universities in foreign countries.

The publications include the Journal of Beijing Institute of Agricultural Mechanization and Teaching and Research (not published regularly).

The library has a collection of nearly 240,000 volumes; among them there are Chinese and foreign books of over 30,000 volumes. In addition, there are 1085 magazines.

Beijing Institute of Agricultural Mechanization also had affiliated evening school for employees, medical center and kindergarten.

Beijing Institute of Agricultural Mechanization occupies 980 acres. The completel building area is over 93,000 square meters.

> School Anniversary date: October 15th Current President and Secretary of Party Committee: Zhang Jiguang

(ad

# BEIJING AGRICULTURAL UNIVERSITY School Address: Malianwa, Hai Dian District, Beijing

•

Beijing Agricultural University was founded in October 1949 by combining the School of Agriculture of Beijing University, the School of Agriculture of Qing Hua University and the School of Agriculture of Huabei University in the Jin, Ji, Lu, Yu region. It was under the control of the Ministry of Agriculture. In the initial period after its founding, there were 11 departments in agronomy, horticulture, entomology, plant pathology, forestry, agricultural chemistry, soil build up, livestock farming, veterinary medicine, agricultural economics and agricultural mechanization. The school was located at the original site of the School of Agriculture of Beijing University in Luodou Village.

The predecessor of Beijing University School of Agriculture is the Agriculture Department of Capital College. In 1905 (31st year of the Emperor Guangxu), Capital College began to divide into various disciplines. In 1910, the agriculture university officially began to accept students. It was divided into agriculture and agricultural chemistry. In 1912 (the first year of the Republic of China), Capital College was changed to Beijing University. The Agricultural College was still part of it. In 1914, the Agricultural College became independent and was changed into National Beijing Special School of Agriculture. It also added the Forestry Department and the prepatory class. In 1921, departments such as agricultural economics, agricultural chemistry, plant production, livestock farming, forest production, forest building and forest utilization were established. In 1923, the Special School of Agriculture was changed to National Beijing Agricultural University. It had seven departments in agronomy, livestock farming, forestry, horticulture, biology, plant disease and insect pests and agricultural chemistry. The study period was five years. In 1927, it was merged into Capital University and changed to National Capital University Discipline in Agriculture. In 1928, National Peiping University was formed. The name of the school was changed to National Peiping University School of Agriculture. After the the Luquo Bridge incident in 1937, Peiping fell into enemy hands. The faculty and students of the agricultural school walked all the way to Shanxi. It became

-83-

/27

the School of Agriculture at Northwest Consolidated University. Later on, it was combined with Wugong Northwest Agricultural School. At that time, the temporary puppet government in Beijing combined Beijing and Peiping universities into Beijing University. It had six schools in literature, science, engineering, agriculture, law and medicine. The campus in Luodao Village became a Japanese army barracks. The books and equipment of Beijing University School of Agriculture were moved to the original site of the Business School at Dongzongbu Lane and the former campus of the Korean University in Haiyun Nunnery. It had four departments in agronomy, agricultural economics, agricultural engineering and livestock farming. In 1946, the anti-Japanese war was won and Beijing University was restored. The campus in Luodao Village was taken back. The School of Agriculture was restored in Beijing University. There were nine departments in agronomy, horticulture, entomology, plant disease, forestry, agricultural chemistry, soil, livestock farming and veterinary medicine and agricultural economics. In 1947, the Department of Livestock Farming and Veterinary Medicine was split into the Department of Livestock Farming and the Department of Veterinary Medicine.

Qinghua University School of Agriculture was developed on the foundation of the agriculture discipline at Qinghua School in preparation to study in the United States. When Qinghua was still a preparatory school, agricultural courses were offered. In 1921, the agricultural discipline was officially set up. In 1934, Qinghua University Agricultural Research Institute was founded. There were two groups in plant pathology and in entomology. In 1938, the plant physiology group was added. In 1939, it officially becan to accept graduate students. In 1946, the School of Agriculture was founded. It had four departments in agronomy, plant pathology, entomology and agricultural chemistry. Furthermore, there were three research institutes in agricultural chemistry, plant pathology and entomology.

1200

In 1940, Yan An Institute of Natural Sciences established a Biology Department. In 1942, it was changed into the Department of Agriculture. In 1945, some of the comrades in Yan An Institute of Natural Sciences were relocated to Northern University in the Jin, Ji, Lu, Yu Region to establish an agricultural school. In

-84-

1948, Northern University was merged into Huabei Consolidated University. It was changed to the School of Agriculture of Huabei University. There were four departments in agronomy, agricultural chemistry, veterinary medicine and agricultural machinery, as well as an agricultural biology laboratory. Furthermore, there were three special fields in forestry, veterinary medicine and sugar making.

The Agriculture Department of Fu Jen University was founded in 1946. It was merged into the School of Agriculture of Beijing University School of Agriculture in July 1949.

Beijing Agricultural University has an honorable revolutionary tradition. In 1921, under the leadership of Deng Zhongsha, a socialism study group was formed by Yao Tianyu, Yang Kaizhi and so on in the Agricultural University (special school in agriculture). In 1922, the Beijing local division at the Agricultural University of the Chinese Socialism Youth League was set up. In 1924, the party branch was established. It was actively involved in the antiimperialism and anti-feudalism student movements. Furthermore, it was organizing farmers in the outskirts of Beijing. Several students at the Agricultural University, such as Lin Kongtong, Xu Dachang, Zhan Leping and Li Qigeng, lost their lives in the opposition to the Beiyang Warlord Government, in joining the Northern Expedition, in participating in land revolutionary struggles. During the Liberation War period, the party branch at Beijing Agricultural University was actively supporting the anti-hunger, anticivil war and anti-suppression student. Moreover, it opened up activities to protect the school in anticipation of the liberation of the city of Beijing.

After the entire country was liberated, Beijing Agricultural University was developing rapidly under the leadership of the party and the government. In 1952, special fields were set up under each department. Furthermore, two special fields in pesticide and city afforestation were added. During the reorganization of the department nationally, the Agricultural Mechanization Department and the Forestry Department were taken away and merged with other units to form Beijing Agricultural Mechanization Institute and Beijing Forestry Institute.

-85-

In 1956, the city afforestation special field was transferred into Beijing Forestry Institute. A special field in agricultural meteorology was added. In 1959, there were special fields in genetic crop breeding, plant physiology and biochemistry, agricultural microorganisms, animal physiology and biochemistry, agricultural biophysics, agricultural electronics and instruments, specialization of Chinese veterinary medicine, fruit trees and vegetables, and soil and agricultural chemistry, which was divided separately into two.

In 1957, the school built the new campus in Malianwa which is in the west suburb of Beijing. The building area was 120,000 square meters. In 1963, the State Council approved the establishment of a graduate school in Beijing Agricultural University on a trial basis. In 1965, it took over the farm in Zhuo Xian from the Ministry of Agricultural Cultivation and established a branch campus in Zhuo Xian.

In 1965, the number of undergraduate students in Beijing Agricultural University had reached 3675. There were 187 graduate students and 77 foreign students.

63

The party and government leaders were very concerned about the growth of Beijing Agricultural University. Chou Enlai, Ye Jianyin, Liu Bozhen, Nie Rongzhen, Peng Zhen, Tan Zhenlin and Wang Renzhong personally visited the school for inspection and guidance. They were encoraging the agricultural university to contribute to the education of agricultural sciences.

Beijing Agricultural University inherited the excellent tradition in education in the old liberated region as well as the academic atmosphere of Beijing University and Qinghua University. It insists on the principle that education is to serve socialist constructions. It also firmly believes that theories must be correlated to reality and the people must be kept in close contact. It stays with the hard working style and insists on the strict requirements in quality of teaching. The academic level has been improving continuously. Special attention has been paid to the teaching of fundamental theories and the training of basic skills. The students thus trained have good foundations in scientific

-86-

theories and capability to work independently. Students and teachers were often organized to go to the front line of production in farming and livestock to carry out work in survey studies and experimental expansion. The students were very modest and hard working.

During the 10 year period of chaos, Beijing Agricultural University was severely damaged. In 1969, it was dissolved for a while. In 1970, it was forced to move to Qingquangou in Ganquan Xian, Shanxi. In 1971, it was merged with Yan An Univeristy. The name was changed to Yan An University. In 1973, according to the instruction of Premier Chou Enlai, it was moved back to Zhuo Xian in the province of Huabei(the original farm of the branch campus of Beijing Agricultural University). The name was changed to Huabei Agricultural University. The 10 year period of chaos brought about serious consequences to the agricultural university. The buildings were occupied by others. It stopped accepting students for nine years. The scientific research work was mostly forced to be terminated. More than half of the instruments and equipment was lost.

Beijing Agricultural University still insisted on carrying out its duties under such difficult conditions. The teachers went to the field and held many training classes and correspondence courses to contribute to the training of basic technical personnel. Furthermore, in the northern China area, they opened up wide research collaboration programs and accomplished a lot in the areas of soil improvement, upgrading of the prairie and cattle, breeding new species, prevention of insects and disease, synthesis of pesticides and development of agricultural instruments. After the Gang of Four was crushed, the comrades in the Central Leadership were very concerned about the restoration of Beijing Agricultural University. It was moved back to the original site in Malianwa, Beijing. It was required to become "not only an education center for agriculture, but also a research center in agriculture". In the (decision of the Chinese Party Central on the problems of accelerating agricultural development), it was clearly pointed out that the "central wished to run several key

/28

higher agricultural research institutions and higher agricultural schools such as the Chinese Academy of Agricultural Science and Beijing Agricultural University well".

Presently, the institute has eight departments and 17 special fields. The study period is five years for veterinary medicine, and four years for the rest. The graduate program is three years. Agriculture Department

Agriculture Special Field

Plant Physiology and Biochemistry Special Field Large Field Crop Genetic Breeding Special Field Horticulture Department

Fruit Tree Special Field

Vegetable Special Field

Plant Protection Department

Plant Pathology Special Field Agricultural Insect Special Field Agricultural Microorganism Special Field

Soil and Agricultural Chemistry Special Field

Soil and Agricultural Chemistry Special Field

Agricultural Chemicals Special Field

Livestock Farming Department

Livestock Farming Special Field

Veterinary Medicine Department

Veterinary Medicine Special Field

Chinese Traditional Veterinary Medicine Special Field Animal Physiology and Biochemistry Special Field Agricultural Economics Department غد مير

Agricultural Economics Special Field

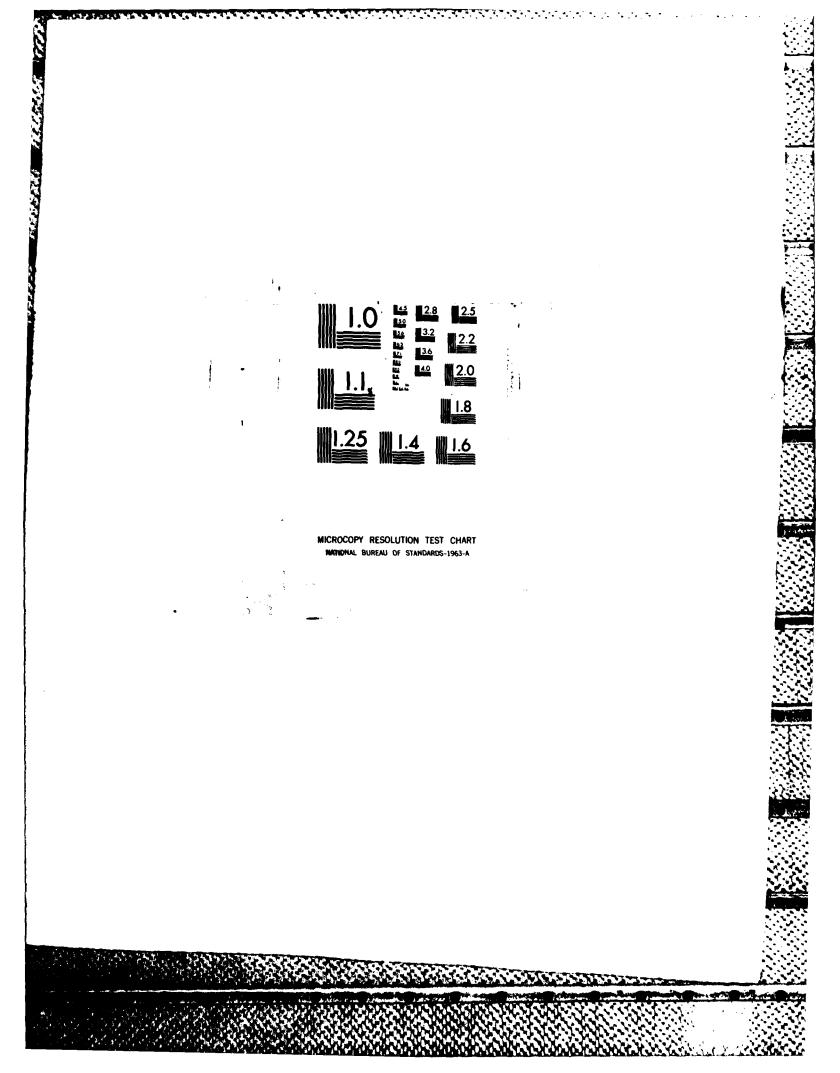
Agricultural Physics and Agricultural Meteorology Department Agricultural Meteorology Special Field

Agricultural Biophysics Special Field

In 1980, there were 771 undergraduate students and 73 graduate students. In addition, there was one American graduate student.

The institute currently has 2263 faculty and staff memberse among them 695 are teachers. Of the teachers, there are 41 confessors, 94 associate professors, 396 lecturers and 164 teachers and assistants.

HD-A137 587	BRIEF INTRODUCTION TO HIGHER EDUCATION INSTIT CHINA(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATTER 12 JAN 84 FTD-ID(R5)T-1082-83								UTIONS IN SON AFB OH		9	1
UNCLASSIFIED	LASSIFIED								F/G 5/9		NL	
	<u> 1</u>								87 <u>)</u>			
					₹ <b>X</b>	eñ.				ाद्यः		
											1.2	ļ
							N.	-				
				ž		3		,836°				1
												-



The scientific research work at Beijing Agricultural University has a long history and tradition. Qinghua University School of Agriculture had set up a research institute in the 30's. Beijing University School of Agriculture had the base to perform research work in many disciplines. Huabei University School of Agriculture had established many field stations and veterinary medical centers all over the area to promote agricultural production techniques. After Beijing Agricultural University was founded, a scientific research department was established in 1954. In 1955, a schoolwide discussion on science was held. It was stressed that the scientific research work was to serve the needs in improving the technical standards and developing production in agriculture and livestock breeding. The scientific research work was included in the national plan. It also accepted the research projects granted by related organizations. In the meantime, teachers were organized to visit Xizang, Xinjiang and the northeast, middle south and coastal regions to provide a scientific basis for the development of these areas. It has selected to breed over 10 superior wheat species and expanded them to over 10 million acres of fields in northern China and the northwest. In addition, it has also developed superior species of corn, potato, fruit trees and vegetables which are high in productivity, excellent in quality, resistant against diseases and early in harvesting. Moreover, these crops were expanded. It had carried out work to improve the species of cattle, sheep, pigs and chickens. It was involved in the studies on the rotten disease of apples, the stem rust of wheat, the withering of cotton, the virosis of rice, and snout moth's larva of rice, the three major diseases of cabbage, the late disease and virosis of tomato and potato, apple worm and wheat stem fly, and found effective prevention measures. Over 10 agricultural chemicals and growth stimulants were developed. Moreover, experimental studies in production applications were performed. Many achievements have been made in the pathological studies on the acute enteritis of horses, the poisoning of pigs due to the black spot disease of the sweet potato, and pneumonia of pigs. Preventive measures were proposed against roundworm disease in pigs and the

-89-

kidney worm disease in pigs. In recent years, it has made significant progress toward the overall management of drought, waterlogging, alkalinity and salinity for large areas in northern China. In the basic research area, over 10 parasites in livestock and 100 insects have been found. Very good results were obtained in the areas of genetic variations of fungus, material transport mechanisms in the organism in plants, investigation of systolic protein in plants, and study of the ancient Chinese agricultural books. These results have been well received internationally. Twelve items received awards in the National Science Meeting. In the recent two years, 12 more items were praised by the Ministry of Agriculture. There were 19 accomplishments which were determined as the key agricultural technologies to be promoted by the Ministry of Agriculture in 1980.

Beijing Agricultural University has always been very particular about building up its teaching team. It has retained experts with real knowledge to teach at the university. Famous agricultural experts, such as Dai Fanglan, Yu Dafa, Xiong Dashi, Tang Peisong, Li Lianjie, Huang Ruilun, Lou Chenghou, Liu Chongyue, Shen Qiyi, Lin Chuanguang, Lu Jinren, Zhou Mingyang, Cai Xu, Li Jingxiong, Shen Ni, Peng Keming, Ye Hecai, Hu Bingfang, Qiu Weifan, Zhou Jiachi, Tang Yiren, Wu Zhongqian, Zhang Heyu, Wang Hongzhang, Wang Yihu and An Xiji have taught in the university.

In recent years, the school has acquired considerable instrumentation and equipment for teaching and research. The equipment includes electric computers, electron microscope, remote sensing and telemetric devices, various automatic analyzing instruments and color video recorder and player.

The library is one of the member of the national library centers. It has a collection of 500,000 volumes. Among them, there are 100,000 foreign books and nearly 1000 foreign magazines. There are over 2000 periodicals in total. More than 50 of them have been subscribed since the first issue. Among them, there are periodicals published in the middle of the 18th Century. It has 20,000 Chinese agricultural books; among them over 200 are ancient.

-90-

Some of them are first editions carved in the early Ming and early Qing dynasties, as well as editions prepared locally.

**N)** 

Beijing Agricultural University publishes (Journal of Beijing Agricultural University Quarterly). It has established interlibrary exchange relationships with over 200 academic organizations, higher education institutions and research outfits. The Scientific Technical Information Office and the Agricultural Education Study Institute publish several technical data and foreign higher agricultural education information publications. It has established information exchange programs with several hundred teaching and scientific research organizations.

The school has a 10,000 acre farm in Zhuo Xian. In addition, it has set up an experimental station for the overall control of drought, waterlogging, salinity and alkalinity in Qiuzhou Xian, Hebei. In Weichang Xian, there is an experimental station to breed cattle for meat.

Beijing Agricultural University occupies over 760 acres. The school building area is over 120,000 square meters.

Beijing Agricultural University has always been serious about international cultural exchanges. It has invited over 50 foreign experts to lecture at the university. Under the trust of the Ministry of Education, it has accepted 123 foreign students from 13 countries in Asia, Africa and America. Furthermore, it has sent over 100 teachers to 19 countries for advanced study and research. There have been over 100 teachers, cadres and students who were sent abroad to attend over 30 meetings and to conduct visits to over 40 countries. Moreover, six experts were sent abroad to teach and to offer assistance. These international activities have greatly improved the friendship between foreign scholars and Beijing Agricultural University. This also has had a promotional effect on the teaching and research in the university.

For over 30 years, it has trained a total of over 10,000 undergraduate students and 460 graduate students. Among them, approximately 40% of the graduates are working in agricultural education, 25% in agricultural scientific research and 35% in agricultural administration and technical management.

> School Anniversary date: October 12 Current president: Yu Dafa Party Committee Secretary: Li Guangwen -91<sup>-</sup>

/29

# BEIJING FORESTRY INSTITUTE

Part of the second s

にん ちょう ちょう き

School Address: 'Xiao Village, Hai Dian District, Beijing.

Beijing Forestry Institute was founded by merging the forestry department of Beijing Agricultural University and the forestry department of Hebei Agricultural Institute during the reorganization of higher education institutions in 1952. The predecessors of the forestry department of Beijing Agricultural University were the original forestry departments in Peiping University School of Agriculture and Qing Hua University School of Agriculture. In 1953, Plain Agricultural Institute was abolished. A portion of the teachers and officials merged into Beijing Forestry Institute. At that time, the campus was located at the Dajiu Temple in the Northwest outskirts of Beijing. In December of 1954, it was moved to the Qing Hua East Road address in Hai Dian District in Beijing.

During the initial period, Beijing Forestry Institute had an undergraduate program in forestry and a special field in forestry. In 1953, a forestry department was founded which had a forestry special field. In 1954, the forestry department was divided into the departments of afforestation and forest management. Under these two departments, there were special fields in afforestation and forest management. In 1956, the landscaping special field in the architecture engineering department of Qing Hua University was merged into the afforestation department of the institute and became the tree planting special field for cities and residential areas. In 1957, the afforestation special field was merged into the forest management department to become the forestry department. The tree planting special field for cities and residential areas became an independent department. In 1958, the forestry department added 3 special fields in soil and water conservation, insect and disease prevention in the forest, and forestry economics. In the same year, the forest industry department was founded. It had two special fields in wood machinery processing and chemical processing of forest products. In 1959 came the special field in design and menufacturing of forest machinery. In 1960, the forest industry department was divided into the overall utilization of wood department and the forest machinery department. The wood overall utilisation department has 3 special fields in carpentry, forest

/30

chemistry, and organic synthesis. The forest machinery department had special fields in the design and manufacturing of forest machinery, and radio electronics. Departments of tree physiology, and mathematics and science were also established. The tree physiology department had special fields in tree physiology and biophysics. The mathematics and science department had 4 special fields in mathematics, physics, chemistry, and meteorology. In 1962, the departments and special fields were reorganized in the forestry institute. Beijing Forestry Institute was readjusted to 3 departments of forestry, forest industry, and gardening and a fundamental division from the original 6 departments. The 11 special fields in forestry, forest insect and disease prevention, water and soil conservation, forest economics, mechanical processing of lumber, chemical processing technologies of forest products, design and manufacturing of forest machinery, organic synthesis, gardening, tree physiology, and biophysics remained. In 1963; further reorganization was carried out. The organic synthesis special field was eliminated from the forest industry department and the special fields in tree physiology and biophysics were abolished from the gardening department. In 1965, the gardening special field was eliminated. The students and faculty were merged into the forestry department.

In the ten year period of chaos, Beijing Forestry Institute was seriously damaged. In November of 1969, the school was moved to Yuanan. In 1973, Kunming Agriculture and Forestry Institute in Yuanan was merged into it. The name was changed into Yuanan Forestry Institute. It had 4 departments in forestry, forest industry, subtropical forest, and gardening, as well as a fundamental division. Under these departments, there were 9 special fields in forestry, water and soil conservation, forest insect and disease prevention, forest economics, design and manufacturing of forest machinery, mechanical processing of lumber, chemical processing technologies for forest products, city gardening, and subtropical forests. Since 1973, with the exception of chemical processing technologies for forest products, other special fields began to accept students one after another.

After the "Gang of Four" was crushed, with the approval of the State Council, Beijing Forestry Institute was moved back to the original site in Beijing from Yuanan in 1979. It was placed under the jurisdiction of the Ministry of Foresty.

After restoration and reorganization, the institute currently has 4 departments and 8 special fields. The study system is 4 years.

Forestry Department

Forestry Special Field

Forest Insect and Disease Prevention Special Field Forest Economics Special Field

Water and Soil Conservation Department

Water and Soil Conservation Special Field

Gardening Department

at all the second

City Gardening Special Field

and the second second second second

Forest Industry Department

Lumber Mechanical Processing Special Field

Forest Machinery Design and Machinery Special Field

Forest Product Chemical Processing Technology Special Field. In addition, there is one fundamental division and one teaching and research group in Marxism and Leninism.

In 1980, there were 934 undergraduate students and 17 graduate students.

The entire institute currently has 771 faculty and staff members, among them 315 are teachers. Of the teachers, there are 8 professors, 55 associate professors, 180 lecturers, and 72 teaching assistants.

Beijing Forestry Institute has been actively developing scientific research activities in conjunction with the realities in forest production. Since its founding, it has already completed 102 projects in which over 20 were key subjects for our country. Four items were awarded in the 1978 national science meeting. In 1980, it received one second class award and 2 third class awards in science and technology issued by the Ministry of Forestry. Significant accomplishments have been achieved in the studies on the afforestation techniques in rocky mountain areas in northern China, mixed forests, afforestation in sandy areas, overall control of mud, rock, and water flow, classification of flowers in city gardening, modification of lumber characteristics, and forest chemical fire extinguishers. In addition, some teachers also translated, edited, and wrote a number of books and papers. For example, Professor Chen Luhin edited and translated ((Forestry Dictionary)) and ((Japanese-Chinese Forestry Dictionary)). He also published the paper entitled ((Procedures and Concepts in the Realization of Modernization of Forests in Our Country)). **Professor** Wang Zhengru edited and translated ((Tree Physiology)) and ((English-Chinese Forestry Dictionary)) and wrote many technical papers, such as ((Observation of Plant Community at Xuanwu Lake in Nanjing)), ((History of Algae Studies)), ((Observation of the Seed Germination and Seedling Growth of Metasequoia)), and ((Status of Modern Plant Classification)), Professor Fan Jizhou has many papers in forest management and tree measurement. Professor Chen Junyu wrote the paper entitled, ((Study on the Resources of Plum Blossom Varieties)). Professor Guan Junwei has many papers on the patterns of water and soil loss on earth mountain regions and loess plateau. Professor Shen Zonggi, in addition to editing teaching materials in wood and lumber, has successfully developed the pressed wooden grinding sphere, pressed wooden weaving shuttle, and pressed wood anchor.

/31

Currently, Beijing Forestry Institute has 6 research institutes in forest ecology, forest survey and planning, soil and water conservation, planting and gardening, and forestry (gardening) history.

It has 69 laboratories and specimen rooms.

The publication is the ((Journal of Beijing Forestry Institute)). The library at the institute currently has over 320 thousand volumes in its collection. Among them, 270 thousand books are in Chinese and over 50 thousand books are in foreign languages. There are 800 kinds of periodicals.

Beijing Forestry Institute has its own affiliated experimental forest at Miao Feng Mountain, seedling garden, metal shop, and printshop.

Beijing Forestry Institute originally occupied 1,190 acres. The school building space is 83,300 square meters. Since the ten year period of chaos, some other organizations have been occupying a portion of the space. Currently, the actual space utilized is 36,000 square meters.

Since its founding in 1952, the institute has trained over 7,000 undergraduate students, 200 graduate students, 200 teachers taking advanced courses, and 2,000 correspondence students. In addition, it has also trained over 30 foreign students.

> School Anniversary Date: October 16 Secretary of Party Committee: Wang Youqin

## CHINESE CAPITAL MEDICAL COLLEGE

School Address: Dongdansantiao, Dongcheng District, Beijing

The predecessor of Chinese Capital Medical College was Beijing Xiehe School of Medicine which was founded in 1919. In early 1942, it was forced to terminate by the Japanese Imperialists. Beijing Xiehe School of Medicine, at that time, had considerable reputation in the world. It was the only eight-year medical school in our country. After entering the school, the students went through 3 years in preparatory programs and 5 years in their majoring courses. Upon graduation, they were awarded doctor of medicine degrees. After World War II, the school was restored in 1947. It began to recruit students. After the entire country was liberated, the name of the school was changed to Chinese Xiehe School of Medicine. In 1952, it was placed under the jurisdiction of the Department of Health within the Military Committee. In 1953, it stopped accepting new students. After the last year of students who were recruited in 1952 graduated in 1957, the school was dissolved. Its various organizations were merged into Central Health Laboratory. They became China Medical Science Institute.

In 1959, some experts and professors in the medical community suggested that universities similar to Xiehe School of Medicine should be opened to train high level medical personnel for our country. This recommendation was praised by the commrades in the Central Leadership. In the same year, the State Council approved the establishment of "Chinese Medical College." The system, course offerings, and teaching arrangement of the school were basically based on the experience of Xiehe School of Medicine. The basic medical courses in Chinese Medicine College were under-

96

taken by Experimental Medicine Institute in the Chinese Medical Science Institute. The institute provided a teaching staff in Various fundamental courses and equipment to Chinese Medical College. Xiehe Hospital was designated as a teaching hospital for the college (in 1972, it was changed to Capital Hospital). Chinese Medical College began to accept new students in 1959. That year, it accepted 60 freshmen students and 30 fourth year students. In 1960 and 1961, it again recruited fourth year students. These students came from Beijing, Shanghai, Tianjing, Guangzhou, etc. They were college students and had already studied for three years. After entering the school, they had to finish a five year program in their majors before they could graduate. Since 1962, all the students at Chinese Medical College came from Beijing University Preparatory Class of Medicine.

The characteristics of Chinese Medical College are rigorous selection of students, relatively longer study period, and wider knowledge for students. In the entire teaching process, it emphasizes developing the scientific thinking methodology of students. In over thirty years, it has contributed greatly toward the education in medical science.

The professors who have contributed significantly to teaching, scientific research, and clinical research include:

Professor Liu Shihou's publications in the area of endocrine, before the liberation, had already reached international standards. In the classical aspect, he was the first Chinese Chief of Internal Medicine in the history of Xiehe School of Medicine.

Professor Zhang Xiaoqian is a famous internal medicine specialist. He had been the persident of Xiangzhi Medical Institute. He has contributed greatly to medical education. Furthermore, he has very rich clinical experience.

Professor Lin Qiaozhi is a famous gynecologist in our country. He has very broad knowledge in gynecology and obstetrics and skillful surgical techniques.

Professor Zhang Xijun is a famous physiologist in our country. In his early years, he had done research work and published abroad. He is internationally known.

Professor Feng Lanzhou is a famous parasitism expert in our

country. He is good at innovative invention through practical actual survey. In the early sixties, he was the only scholar getting a national research award in the medical field.

100

Professor Xie Shaowen is a famous bacteriological immunity expert. His early publication in bacteriology was close to international standard. In recent years, he has been dedicated to working in immunity.

**Professor** Zhang Jian is a famous anaotomy expert in our country.

S. S. S. S. S.

with the state of the state

Professor Hu Zhengxiang is a famous pathologist in our country.

During the ten year period of chaos, Chinese Medical College was seriously damaged. It was dissolved in 1970.

After the "Gang of Four" was crushed, it was restored in August of 1979 after the approval of the State Council. The name of the school was changed to Chinese Capital Medical College. The program is eight years. The first two and a half years is preparatory. Natural science courses are taught at Beijing University Biology Department. The latter five and a half years of study is the major program. Students are learning fundamental medicine, clinical medicine, and preventive medicine courses in the college. Furthermore, they have all completed their thesis work. The students become high level healthy medical personnel with socialistic awareness, and medical knowledge. Currently, the school is summarizing its experience and developing exchange and /32 collaboration activities between universities in and out of the country. It is working very hard toward becoming a college with advanced medical standards.

Chinese Capital Medical College is under the dual jurisdiction of the Ministry of Health and the City of Beijing. In the process of teaching, it is working very closely with the Institute of Medicine of Chinese Academy of Sciences. They are supporting each other. The technical power and equipment of the Institute of Medicine of Academy of Sciences have been fully utilized.

For the teaching of Eunadmental medicine, the teaching and research offices 4 e in ...atomy, histology and embryology, physiology, biochemistry, microbiology and immunology, pharmacology, and

98

pathological physiology. As for clinical medicine, the high level
. staff at Capital Hospital is in charge of teaching it. Capital
Hospital is the designated teaching hospital.

The library of the Institute of Medicine of Academia Sinica is the medical science library with the richest collection in the country. It provides all the information for teaching and research.

Chinese Capital Medical College has already accepted two classes of undergraduate students of 61 in total. Currently, they are studying at the department of biology in Beijing University. In the second half of the 1981 academic year, these students will be transferred to their own major program.

In the recent two years, Chinese Capital Medical College and Institute of Medicine of Chinese Academy of Science have collectively recruited some graduate students. In 1980, there were 450 graduate students in the school.

> Current President: Huang Jiasi Secretary of Party Committee: Lin Shixiao

## BEIJING MEDICAL SCHOOL

School Address: Xueyuan Road, Hai Dian District, Beijing

The predecessor of Beijing Medical School is Beijing Medical Special Training School. It was founded in 1912, after the victory of the 1911 Revolution. The school was located in an old building in Housun Park at the Octagonal Glazing Well outside Heping Gate in Beijing. This was one of the earliest medical schools set up in our country. At that time, there were only a two-story building and two classrooms. In January of 1912, it recruited 72 students from Beijing and Shanghai. In August, 22 more were recruited. In March of 1917, there were 22 graduates. This was the first class of graduates of the Medical Training School. In June of the same year, there were 14 more graduates.

During the initial stage of its founding, the Medical Special Training School only had a special field in medicine. In February of 1914, the human anatomy office was established. This was the beginning of official and legal human anatomy studies in our country. In May of 1915, it set up a "clinic" at the medical bureau in front of Xinglong Temple outside Xuanwu Gate. In August of the same year, it established an affiliated "midwife training center." Thirteen nurses were recruited. In 1916, a female ward and a maternity ward were set up. In 1922, the library was built. At the tenth anniversary of the founding of the Medical Special Training School, the school published a "collection of papers on the tenth anniversary."

Beijing Medical School has an honorary revolutionary tradition. The students and faculty participate in various progressive and revolutionary activities. As early as the early stage of the "May 4th" movement in 1919, some students participated in the great anti-imperialism, anti-feudalism revolutionary movement which asked for science and democracy. For example, the student then, Liang Feng (now professor at the affiliated hospital), was one of the student representatives. In the demonstration parade, he was actively promoting democratic revolutionary ideology. He was arrested by the reactionary authority. After he left jail, he still insisted on participating in progressive activities. When our national crisis was becoming more and more serious day by day in 1935, the vast students and faculty joined the "December 9th" anti-Japanese campaign. The current vice minister of health, Huang Shu, was the chairman of the student union. The current President of the school, Ma Xu, was the vice chairman of the student union back then. They were the participants of the "December 9th" campaign. After winning the anti-Japanese war, despite the strict control of the reactionary Nationalist Party, the faculty and students were not afraid of power. They continued to participate in various progressive activities.

12.2

Beijing Medical School has changed its name many times in its history. In January of 1924, the name of the school was changed to Beijing Medical College. In 1927, it was changed to National Capital University School of Medicine. In 1928, it was changed to National Peiping University School of Medicine. In the same year, the school's request for the old site of the Department of Audit in Beiyang Lane in order to expand the hospital was ignored by the authority. The vast number of students and faculty sat in the snow overnight. In 1929, the school finally obtained a

hospital with over 100 beds. In 1932, the program for the major was six years. It was recruiting high school graduates. Furthermore, a student union was established. After the Luguo Bridge Incident in 1937, the school was suspended. It was restored in May 1938 and became Peiping University Medical School. The school program was changed to four years. At that time, part of the students went to study there and another part of the students and faculty fled to Xian after the anti-Japanese war began. The medical school of Northwestern Consolidated Universities was thus established. In 1942, the school was relocated from Housun Park to Xishi Warehouse. In 1945, the Japanese surrendered. The various schools in Northwestern Consolidated Univertities returned to Beijing. The medical school was changed to Beijing University Temporary Training Class. Soon after, it was officially named Beijing University School of Medicine.

A corner on the campus of Beijing Medical School.



Before the Liberation, Beijing University School of Medicine had three departments in medicine, dentistry, and pharmacology, and an affiliated hospital. There were 134 beds. It was able to provide 200 students for practice purposes. At that time, there were 412 students on campus. Since the founding of the medical special training school in 1912, to the Liberation of the entire country in 1949, in a total of 37 years, it had trained 1,069 graduates. Many of them have already become famous scientists and professors in our country. In 1949, Beijing was liberated. In 1950, Beijing University School of Medicine was reorganized out of National Beijing University to become an independent institution. In 1952, it was officially named Beijing Medical School. The victory of Chinese revolution opened a new chapter in the history of Beijing Medical School. The Government invested a great deal to build the school. The new campus was located at 38 Xueyuan Road in the northwest outskirt of Beijing. In 1954, a number of buildings with over one hundred thousand square meters in area had been completed. In 1955, the school moved into the new site.

/33

a a far a

After the Liberation, the students and faculty were actively engaged in various campaigns such as land reform, suppression of counter-revolutionaries, resistance against the U.S. and aiding Korea, Against the Three Evils, Against the Five Evils, and ideology reform. Many faculty members and students joined the border area anti-syphilis team, medical team for the engineering project to manage Wei River, surgical team for resisting the U.S. and aiding Korea, medical team to save earthquake victims, medical team in Hexi corridor, medical team in Yuanan, Tibet medical team, and Guyana medical team. The vast faculty and students had received many practices and contributed to the medical career.

In order to suit teaching against the needs in socialist economic construction, the People's Hospital, Ping An Hospital, and Village Building Department Staff Hospital were changed to Beijing Medical School Affiliated Hospital in 1958. In 1959, the third affiliated hospital with 600 beds was built. Together with the affiliated stomatological hospital, it had 6 affiliated hospitals at that time. The number of beds was increased to 2,600. The maximum clinical visits were 9,000 person times per day. It was accomodating 1,500 students as interns. It was equivalent to 20 times of that before the Liberation.

During the ten year period of chaos, Beijing Medical School was seriously damaged. It stopped accepting new students for 5 years.

After the "Gang of Four" was crushed, normal teaching order was restored. The quality in teaching was gradually improving.

Beijing Medical School currently has 5 departments and 7 special fields.

Medical Treatment Department

Medical Treatment Special Field

Fundamental Medicine Department

Fundamental Medicine Special Field

Public Health Department

Health Special Field

Stomatology Department

Stomatology Special Field

Pharmaceutics Department

Pharmaceutics Special Field

Pharmaceutical Chemistry Special Field

Chemistry Special Field

With the exception that the various special fields in the pharmaceutics department are operating on a five year program, the remaining departments are six years.

In 1980, there were 1,944 students on campus. There are also 228 graduate students and 33 foreign students.

The school currently has 6,036 faculty and staff members. The teaching team is very strong. Among the teachers, there are 57 professors, 97 associate professors, 772 lecturers, and 57 assistants.

The medical school has 6 affiliated hospitals, 2 teaching hospitals, 1 middle level health school, and 1 pharmaceutical plant operated by the department. Currently, the hospitals have 2,061 beds. Each day, the number of office visit exceeds 6,000. There are over 2 million outpatient and emergency cases per year. The hospitals have 134 physicians-in-charge, 581 resident doctors, and 1,093 nurses.

Beijing Medical School has always been emphasizing scientific research work. The school presently has 12 research institutes in fundamental medicine, clinical medicine, environmental medicine, athletic medicine, pharmaceutical studies, stomatology, blood disease, urological surgery, mental disorder and mental health, clinical pharmacology, tumor, and medical education information. Five independent research laboratories in occupational

diseases, digestive system diseases, liver diseases, surgical tumor, and plastic surgery were also established to be responsible for the research projects on the principles of acupuncture anaesthesia, tumor, tracheitis, hepatitis, birth control, environmental protection, heart disease, artificial heart, silicosis, and industrial poisoning.

The faculty members of Beijing Medical School were studying large bone muscle ache.



Beijing Medical School has always been paying alot of attention to scientific research work. Significant progress had been made after the Liberation. Before 1949, the entire school only had 9 papers. Currently, there have been 1,024 papers published since 1977. In the national science meeting held in March of 1978, 46 research projects were rated as first class national accomplishments. Twenty-nine were praised at the health system science meeting. Through the evaluation of experts in the Ministry of Health, these 75 projects have already reached domestic and international advanced level. Many of these research results were used in academic exchange activities in and out of the country.

-

1

The library presently has 260 thousand volumes of books; among them there are nearly 60 thousand foreign books. In addition, there are 953 periodicals with over 40 thousand volumes.

Presently, the entire institute has over 80 teaching laboratories. The laboratories are equipped with computers, electron microscopes, fluorescent microscopes, multi-channel recorders, superhigh speed centrifuges, etc. In recent years, the school has been continuously sending outstanding teachers and doctors to study abroad. In addition, 39 teachers were chosen and sent to higher education institutions and research organizations in Japan, U.S.A., England, and Germany to study, visit, and participate in scientific research work and technical meetings. In recent years, there have been over 100 groups of representatives and students from universities, research organizations, and technical groups in the U.S., Japan, West Germany, Denmark, Sweden, Norway, etc. which arrived at the school for a visit. The number of people reached over 500. These exchange and interaction activities promoted the friendship with foreign scholars, which in turn will stimulate the work in teaching, medical treatment, and research.

Beijing Medical School occupies 548 acres. Presently, its building space is 230 thousand square meters.

Since the Liberation for over thirty years, Beijing Medical School has trained 13,000 high level special personnel for our country, which is 11 times the total number of graduates in the 37 years before Liberation. These graduates are currently contributing their own strength in education, medical treatment and health, and scientific research toward the Four Modernizations in our country.

> School Anniversary Date: October 26. Honarary President: Hu Chuankui. Current President: Ma Xu. Secretary of Party Committee: Peng Ruicong.

BEIJING INSTITUTE OF TRADITIONAL CHINESE MEDICINE School Address: Heping Street, Zhaoyang District, Beijing.

In order to inherit and carry forward the traditional medicine heritage and to widely expand Chinese medicine so that it is combined together with modern sciences, Beijing Institute of Traditional Chinese Medicine was founded in 1956. It was one of the 4 traditional chinese medicine institutes founded in the early stage after the liberation of the whole nation. It is currently under the jurisdiction of the Ministry of Health.

/34

During the early period after its founding, Beijing Institute of Traditional Chinese Medicine lacked teachers and had insufficient buildings. The equipment was very simple and poor. The first class accepted 120 students in the special field of traditional Chinese medicine. In 1957, it retained over 100 backbone teachers in Chinese and western medicine from all over the country to substantiate the teaching staff. In the same time as the institute was recruiting personnel, it began to prepare for the teaching of various courses and the equipment and instruments needed in teaching western medicine. In a short period, lecture notes were prepared on the internal scripture, febrile diseases, diagnosis, prescription, and Chinese herbal medicine, and the urgently needed equipment was obtained. In order to strengthen the administrative leadership and to establish the normal teaching order, the Ministry of Health officially ordered the hiring of Huang Kaiyuan as the president and Party committee secretary of Beijing Institute of Traditional Chinese Medicine.

In 1958, the institute was relocated from North Gate Warehouse to Sea Transportation Warehouse. The new campus occupied 93 acres. With the development of Chinese medicine, within a period of over 3 years, since 1959, the institute built a teaching building, a laboratory, an 8 story research and administrative building (to be shared with Chinese Medicine Research Institute). The building space reached 40 thousand square meters. In order to resolve the bedside practice base for the students, an affiliated hospital was planned and built in 1958. Various bedside scientific research groups for all the departments were set up. This provided the necessary conditions for improving the teaching quality of traditional Chinese medicine.

In order to train people in teaching and research in Chinese herbal medicine and the pharmacists in pharmacies and pharmaceutical factories, the Chinese herbal medicine special field was added in 1960. Correspondingly, a small scale Chinese pharmaceutical plant was established as the practice site for the graduates of traditional Chinese herbal medicine special field.

During the ten year period of chaos, Beijing Institute of Traditional Chinese Medicine was seriously damaged. Teaching and research work was interupted for as long as 4 years. In 1971, Beijing Institute of Traditional Chinese Medicine and Chinese Medical Science Research Institute merged. After the merger of the two institutions, the teaching system was destroyed and the normal teaching order was interfered with. After the "Gang of Four" was crushed, Beijing Institute of Traditional Chinese Medicine was restored and revived. During the period that the two institutions were merged, due to the expansion in organization and personnel, the institute was moved from the Sea Transport Warehouse at Dong Zhi Gate to the old campus of Hebei Capital Normal College on Bei Huan East Road.

This institute currently has two special fields in traditional Chinese medical science and traditional Chinese herbal medicine. The school systems are 6 and 5 years, respectively. The acupuncture special field will be established. The system is 5 years. Since 1978, it began to accept graduate students in traditional Chinese medical science. The learning periods are 2 and 4 years.

In 1980, there were 686 undergraduate students and 54 graduate students.

The institute currently has 808 faculty and staff members; among them 276 are teachers. Of the teachers, there are 7 professors, 14 associate professors, 115 lecturers, 52 assistants, and 88 teachers.

In the running of the school, Beijing Institute of Traditional Chinese Medicine has always paid alot of attention to the teaching of fundamental courses. The students work hard to study fundamental courses in Chinese and western medicine, especially the fundamental theories of traditional Chinese medicine. It had a relatively strong faculty specializing in fundamental courses.

Some of them were western medical doctors who had systematically studied traditional Chinese medical science, or western pharmaceutical experts who had been engaged in traditional Chinese herbal medicine for a long time. Vice president and Professor Wang Yuchuan has 30 plus years of experience in bedside traditional Chinese medicine, Chinese medical research, and its teaching. He has studied ((Internal Scripture of Huang Di)) extensively. Chief of the teaching and research office of various Chinese medical theories, Professor Ren Yinqiu is very knowledgeable and rich in theories. He has over 30 publications. Chief of the teaching and research office of prescription, Professor Wang Mianzhi came from a traditional Chinese medicine family. His theoretical level is relatively high, and his bedside experience and teaching record are outstanding. Chief of the teaching and research office in fundamental traditional Chinese medical science, Professor Yin Huaihe has unique expertise in treating internal diseases. Chief of the teaching and research office in fevers, Professor Zhao Shaogin, has a unique specialty in sudden fevers. Chief of the teaching and research office in classical medical literature, Professor Liu Duzhou has extensively studied the ideas of Zhong Jing and he is also very effective in bedside practice. Vice president of Dongzhi Gate Hospital, Professor Dong Qianhua, is familiar with traditional Chinese medical science theories. He has extensive experience in utilizing traditional Chinese medicine to treat intestinal and stomach diseases. His bedside experience is also very extensive.

6

In order to make the Chinese medical institute become a teaching center as well as a scientific research center, scientific research work was actively pursued simultaneous to improving the quality. Comments, footnotes, and corrections were made for ancient medical literatures. Over 100 teaching materials and references have been prepared. Among them, the contents of textbooks for various topics in traditional Chinese medical science were written after repeated sorting and organization of numerous numbers of ancient Chinese medical books. They more or less reflect the basic theories and treatment principles of the medical literatures in various generations of Chinese traditional medicine.

States and the second

The writing and publication of these textbooks greatly improved the level of traditional Chinese medical science. Currently, over 50 research topics were developed around the analysis of the vital energy and the state of blood in Chinese traditional medical science and other areas. Some of the items have already obtained some results. The preparation teaching and research office developed the ((Qing Kai Lin injection solution)) successfully. It has a good reputation in the country. Presently, it is widely used in bedside treatment. It is effective against body fever, unconsciousness, and twitch due to encephalitis, pulmonary brain disease, and severe hepatitis. It is capable of reducing the fever and calming down the patient. This is a step towards the combined use of Chinese medical prescription and western medical science.

Currently, the traditional Chinese medical science fundamental theory research institute has been established. It has 13 laboratories with 60 full-time and part-time personnel. Currently, institutes of fundamental theory in Chinese herbal medicine and bedside Chinese medicine are under preparation.

The publication is ((Journal of Beijing Institute of Traditional Chinese Medicine)).

The library, right now, has over 200 thousand volumes of books. There are over 30 thousand volumes of ancient Chinese thread bond books and over 10 thousand foreign books. In order to carry out exchange in medical science with foreign countries, the library on a periodical basis exchanged 120 periodicals with some foreign countries.

The affiliated organizations include Dong Zhi Gate Hospital and Chinese Medicine Preparation Factory.

Beijing Institute of Traditional Chinese Medicine occupies 250 acres. Currently, it has 50 thousand square meters in building space. There are 30 laboratories equipped with various electronics, optical and spectrographic equipment for teaching and research use.

Since its founding, Beijing Institute of Traditional Chinese Medicine has trained 3,130 advanced Chinese medical people for our country. They are working in the areas of treating patients,

teaching, and research all over the country. Many of them have already become the backbone strength in inheriting and carrying forward the medical heritage of our country. Furthermore, work had already begun to combine Chinese and western medical sciences with significant results. In addition, it also trained 122 foreign students from 29 countries. The effect of traditional Chinese medicine on the world has expanded. The friendship between the people has been promoted.

Secretary of Party Committee: Wang Yin

## BEIJING NORMAL UNIVERSITY

School Address: Beitaiping Village, Xicheng District, Beijing The predecessors of Beijing Normal University are Beijing Higher Normal School for Men and Beijing Higher Normal School for Women.

The predecessor of Beijing Higher Normal School for Men is the teacher training program in Capital University which was established in December of 1902. This was the beginning of modern higher education in teacher training in our country.

The 130 or so graduates of the first class of the teacher training program were directly accepted at Beijing through examination or after a second test followed by the recommendation of the provinces. The school system was five years. The first academic year offered general courses. Since the second academic year, there were four types of courses. Courses of the first type were Chinese and foreign languages, in which English, German, French, Russian, and Japanese could be elected as a foreign language. The second type courses were Chinese and foreign history and geography. The third type included physics, chemistry, and mathematics, and the fourth type included zoology, botany, minerology, agricultural horticulture, and physiological health, which are called natural science, in general. Education, psychology, and philosophy were the mandatory courses for all students.

In 1903, the University started an anti-Russia movement against the Tsar of Russia's attempt to take over the northeastern region in our country. The entire faculty and student body of

110

/35

the teacher-training program sent a petition to the Qing Government. They requested the government to resist the invasion of Russian soldiers. Furthermore, communications were also sent to the provincial normal schools in Hunan, Hubei, and Anhui. This anti-Russia movement had a great influence. It was the beginning of student movements in our country.

In 1904, the teacher-training program was changed into a high level teacher-training course. The number of students had been developed to over 300. Furthermore, the first group of students were selected and sent to Japan for advanced study. Wang Tonglin, who became a famous historian later, is one of those students. In 1908, it was changed to the highest level normal school. The school address was located at the factory of colored glaze outside Heping Gate in Beijing. Before the Liberation, the old normal university had always been there.

After the revolution of 1911, the name of the school was changed to Beijing Higher Normal School (also called Higher Teaching School for Men). The Beijing Normal School for Women, which was founded in 1906, also changed its name to Beijing Higher Normal School for Women.

The Higher Normal School for Men officially practiced the preparatory class system. The period was one year. The primary subjects to study were mathematics, physics, chemistry, Chinese literature and foreign languages. Those who passed the qualifying examination could then enter the undergraduate program. The undergraduate program had 6 departments in Chinese literature, history and geography, mathematics and science, English, natural science, and physics and chemistry. Later on, 3 special fields were added in education, physical education, and handicraft and painting. It was regulated that each graduate had to go back to his original province to work. At that time, the school retained some graduates returning after attending the schools in Japan. It absorbed the experience in running the school from the Tokyo Higher Normal School in Japan. Furthermore, an affiliated middle school and elementary school were founded as the sites for student teaching.

Sec. S. C.

The gate and main building of Beijing Normal University.



From 1912 to 1923, Chen Baoquan was the president. He was one of the early scholars who went to Japan. He had led an observation group to foreign countries to study advanced education experience in other countries. He promoted the education which simultaneously emphasized morality, wisdom, and physical fitness. The teacher should serve as examples to students. He had profound influences on the training of good teachers and the developing of teacher training education.

On May 4, 1919, the great "May 4th" movement erupted. The students of Beijing Higher Normal School for Men first gathered at Tian An Men to participate in the parade of Beijing students. After the arrest incident on "June 3rd," the students of Higher Normal School for Women also rushed to the streets against the wishes of the school and parents. Under their leadership, all the women's schools in Beijing also joined in.

Students of Higher Normal School for Men, Kuang Risheng (Husheng), Chen Hongxun (Jinming), Yang Mingxuan, and Song Xianting, were the active participants in "burning the Zhao's residence." 8 students of Higher Normal School for Men including Chen Jinming, Yang Mingxuan, Xiang Daguang, and so on were arrested for personally attacking the traitor Zhang Zongxiang. However, under the protest of the people in Beijing and the whole country, they were released on May 8th. The "May 4th" movement was rapidly developed into a patriotic democratic tide all over the country. It opened a new chapter in Chinese revolutionary history.

Under the influence of the "May 4th" movement, the Communist Youth League and Communist Party Organization were established in 1922 at Beijing Normal University. Li Dazhao, Zhao Shiyan, and Cai Hesen had visited the Higher Normal School for Men and Higher Normal School for Women to carry out the activities in establishing the League and the Party. Chu Tunan, Wei Yechou, Mu Boyin, and so on were the comrades in the Communist Youth League and Communist Party. In the meantime, the Higher Normal School for Men organized the student union for all the middle and higher schools in Beijing. The representatives of the student unions of Higher Normal School for Men and for Women were also important responsible persons in the consolidated student union.

During the period of the "May 4th" movement, the students and faculty of Beijing Higher School for Men and Higher School for Women were famous for their hard working and modest attitude. This has a very good effect on developing outstanding people for the next generation in the society.

Revolutionaries such as Li Dazhao and Lu Xun had taught at the Higher Normal School for Men, Higher Normal School for Women, and later on at Beijing Normal University.

Both Beijing Higher Normal Schools had the atmosphere of student respecting teachers and teachers loving the students. Teaching and learning were mutually benefiting each other. The research atmosphere was also very intense. Especially after the "May 4th" movement, under the inspiration of the spirits of science and democracy, many academic studying groups were formed. For example, the language society, mathematics and science society, English society, natural science society, engineering society, people education society, education study group, etc. were established at the Higher Normal School for Men. Both the teachers and the students noticed the importance of the study and practice of theories in education. For example, special /36

explorations were carried out on Chinese and foreign history in education, education systems, teaching material and teaching method, education philosophy, and psychology. Under the guidance of the faculty members, the students published ((Education Journal)), ((Culture for Workers)), and ((Study of Labor)), as well as many magazines in mathematics and science, physics and chemistry, language, natural science, and history and geology. The Higher Normal School for Women also had journals such as ((Journal of Society of Literature)). Both the faculty and the students published their research results, exchanged their new understandings, and opened up free discussion. The students also used their free time to establish schools for the people and various tutoring schools. During vacation and student teaching periods, they went into various depths in society to conduct an education survey. They also held experimental school classes. In addition, through the graduates which were distributed over the country, an actual survey study on the status of education in the whole country was performed to contribute to the further development of education in our country.

After the "May 4th" movement, under the influence of the new foreign school systems, the middle and elementary education systems in China were reformed. For example, the "6-3-3" system was used (6 years in grammar school, 3 years in junior high, and 3 years in high school). Along with this reform, the Higher Normal School also adopted a series of measures to improve the level of students and to lengthen the studying period. In 1920, the Higher Normal School for Men began a graduate program in education. It accepted graduates from Higher Normal Schools and other specialty schools, as well as juniors from universities. They graduated after two years of study and became high school teachers. In 1921, the program was divided into a 4 year class and a 6 year class. Students were allowed to select their own courses to take starting from the third year.

tret

In October of 1922, after very intense debate, the Beijing Government's Ministry of Education passed the "plan to upgrade all of the national higher normal schools to normal universities" proposed by the principal of Higher Normal School for Men, Li Jianxun.

Beijing Higher Normal School for Men was officially changed into Beijing Normal University. At that time, 5 other higher normal universities had been merged into various conventional universities.

After the founding of the Normal University, Fan Yuan was the president on a part-time basis. Before he became the president of the Normal University, he had negotiated with the British Government to spend the 1900 reparation on education. Furthermore, he invited Cai Yuanpei back from Europe to become president of Beijing University. After he became the president of the University, he used the school directive that "set yourself as an example." He also personally wrote the school song.

Then, Beijing Normal University had 8 departments in education, Chinese, English, history and geography, mathematics, physics, chemistry, and biology, as well as a special program in physical education (changed to the department of education in 1930) and a special program in handwork and painting. In addition to the undergraduate program, special classes were held for the 3 provinces of Shenxi, Guangxi, and Dongbei. There were also a teacher training class for normal schools and a short-term teacher training class. Since the summer of 1922, summer school was held so that the teachers and administrative personnel from all provinces could come to study. The objective was to "improve the knowledge of the teachers in ordinary schools in the country and the administrative personnel in education on the province land." In 1922, a high school course study class was organized together with the Chinese Education Reform Society to train and improve the teachers as well as to promote the development of secondary school education in all the provinces.

The Normal University had been paying alot of attention to the construction and guidance of its affiliated high school. Famous educators such as Liu Liru had been the chief of the affiliated high school. In addition, well known teachers were teaching at the affiliated high school through arrangement.

Under the influence that the Higher Normal School for Men was changed to the Normal University, in May of 1924, the Higher Normal School for Women was changed to "National Beijing Women's Normal University." Yang Yinyu was the president. She was working very closely with the Beijing Government to suppress the revolutionary activities. Not too much later, it was strongly opposed by the students and faculty. In May of 1925, Yang used an excuse to announce the expulsion of 6 student union representatives, including Liu Hezhen and Xu Guangping. It started a large storm at Women's Normal University which shook the whole country. Mr. Lu Xun was teaching at Women's Normal University at the time and he had actively supported the students' fight for justice. In August of the same year, Zhang Shizhao ordered the dissolution of the Women's Normal University based on the excuses of "refusal to be under control" and "no respect to superiors." Mr. Lu Xun headed the "committee to maintain the affairs of Women's Normal University" and personally wrote the "Declaration of Beijing Women's Normal University's Incident." Other professors were asked to co-sign before its disclosures to express their attitude. The Women's Normal University incident was an intense struggle of the revolutionary intellects and young students against the power of feudalism.

In March of 1926, the Japanese imperialism used the excuse of "protecting the 1901 Treaty" to initiate the Dagukou incident together with a total of eight countries, including England and the United States. It raised the anger of all the people. The faculty and students of Beijing Normal University and Beijing Women's Normal University joined the mass parade on March 18th. The reactionary government brutally slaughtered the marching crowd. Three students, Liu Hezhen and Yang Dequn of Women's Normal University and Fan Shirong of the Normal University, were killed. Mr. Lu Xun published an article, "In Memory of Liu Hezhen" to reveal the crime committed by the Warlords.

In 1927, Warlord Zhang Zuolin entered Beijing. In order to strengthen his control of the schools, he arrested many students. Many people were arrested from Beijing Normal University and Beijing Women's Normal University. Together with Li Dazhau, Beijing Normal University students and Communist Party members Xie Boyu and Wu Pingdi were also killed.

In July 1931, the Normal University and the Women's Normal University officially merged to form the National Peiping Normal University. Xu Bingxu was the president. It was divided into 3 schools of literatures, science, and education. The literature school was located at the old address of the Women's Normal University on Mada Street in Shifu. The schools of education and science remained at the glaze factory.

From 1923 to 1931, in an 8 year period, the Normal University was not only oppressed politically by the warlords and the nationalist reactionaries, but also was severely damaged economically. For example, when Lu Xun was teaching, he was only able to receive a very low salary every month. After the nationalist Party ruled Peiping, the situation became worse. School properties had to be mortgaged to survive. Under such extreme poor conditions, many teachers still insisted on continuing their teaching duties.

2222223

Right around the "September 18th" incident, the strength of the Chinese Communist Party at Beijing National University was gradually developed. Under the guidance of the Party, the mass organizations such as anti-imperialism union, socialism union, teacher's union, left union, and the reading group were actively involved in patriotic anti-Japanese activities. After the "September 18th" incident, the students and faculty joined the struggle to resist the Japanese and Chiang Kaishek. In early December of 1931, the students and faculty of the Normal University participated in the south bound demonstration group and undertook the duty of picketing. After the "January 28th" incident, the anti-Japanese patriotic group at the Normal University issued a declaration to actively support the anti-Japan crowd in Shanghai and the militiamen in the Northeast region. Furthermore, people were sent to join the anti-Japanese army led by Ji Hongchang.

In 1932, the nationalist party government conspired to abolish the Normal University using the excuse that Beijing Normal University was always agitating student movements. The entire faculty and students at Beijing Normal University were strongly opposing the idea. 38 professors jointly sent their petition and opened up the movement to protect the school. The student union organized lecture groups to protect the school. They described the listing of Beijing Normal University and the current status of its graduates serving the middle and elementary schools. They also explained the characteristic duty of the Normal University and the significance in doing higher education well. After many intense struggles, the conspiracy to eliminate the Normal Univeristy was defeated. After many difficulties, the National University was left alone. However, the Ministry of Education of the Nationalist Party Government decided to stop accepting students for one year to "reorganize the school." Furthermore, Li Zheng was retained as the president. Since then, the school authority and the Nationalist Party Government became one entity. The counter revolutionary power controlled the Normal University. They established the disciplinary system and set up a student activity guidance committee to tighten their control over students. At that time, the spy organization of the Nationalist Party, the "Honesty Group," also established a contact point. Before the "January 29th" movement, in two separate cases, several tens of students were expelled.

/37

During the "January 29th" movement in 1935, the students of the Normal University joined the large demonstration by college students in Beijing, despite the warning and threat of the school, as well as the siege of the police and soldiers. They joined the students from Peiping and Tranjin going south to promote their idea. In early 1936, under the leadership of the Party, the "Chinese National Liberation Pioneers" of Peiping held the first meeting of representatives at the National University. In May of 1937, the secretary of Party committee at the school, Lin Yishan (one of the representatives from Peiping) attended the national meeting of representatives of the Chinese Communist Party. After the "July 7th" incident, according to the instruction of the Party, Yang Xiuxiong and Lin Yishan led the fleeing students from Peiping and Tianjin and organized them into a guerrilla force which fought in the anti-Japanese battlefields in the Ji, Lu, and Yu region.

Since the eruption of the anti-Japanese war in 1937 to the victory in 1946, Beijing Normal University had gone through many difficult times during the war era. After the "July 7th" incident,

the Japanese Imperialism occupied Peiping. The mathematics and science school was occupied by the commanding post of the Japanese security force and the literature school was taken over by the Japanese Air Force Command. Books and instruments were seriously damaged. The school was forced to move westward. It joined Peiping University and Beiyang Engineering Institute of Tianjin to form the Temporary University of Xian. It was later changed to the Northwest Consolidated University. Since then, it was moved many times and the name had been changed a number of times. It was set up in Hanzhong, Chenggu, and Lanzhou. During this period, the equipment of the school was very poor. There were only a few books and instruments.

After the victory of the anti-Japanese war, in July of 1946, Beijing Normal University was restored in Beijing. At the time, the name was Peiping Normal College. The students and faculty, scattered all over the place, gradually returned to Peiping. Peiping Normal College had 12 departments in Chinese literature, English, history, geography, mathematics, physics, chemistry, natural science, education, physical education, music, and home economics, as well as a special class in handwork and physical education. The citizen training department was abolished. A nursing room was established.

In the second half of 1947, the Chinese People's Liberation Army changed from defense to offense. In order to maintain its reactionary rule, the Nationalist Party tightened its control over student movement. In March of 1948, the students of 6 universities in Peiping and Tianjin (Beijing University, Qing Hua, Nan Kai, Normal University, Sino-French, and Yanjing) were on strike to protest the illegal lock-up of the student union. On April 6, the janitors, campus police, lecturers, and assistants also struck. On the morning of April 9, a large number of special agents dashed into the student dormitories with guns to attack the progressive students. 8 students were arrested and 2 were seriously injured. The student union was destroyed. This is the "April 9th bloody incident." In August of the same year, the incident of the illegal detention of progressive professor Xu Yinchao took place. The underground secret organization of the

Party at the Normal University arranged the liberation welcoming committee to open up activities to protect the school. In the 47 years before the Liberation, a number of excellent people emerged in this higher education institution, full of revolutionary tradition. For example, the graduates of the Normal University, Du Bingcheng, Shao Shiping, Huang Dao, Xu Minghong, Wang Wenbing, Zhang Renhuai, Zhang Youguang, and Zhou Xiaozhou had significant contribution to the revolution in China.

On January 31, 1949, Peiping was peacefully liberated. Beijing Normal University returned to the hands of the people. It began its new life.

In 1950, Mao Tsetong personally wrote the sign of "Beijing Normal University." In 1952, after the reorganization of schools and departments of the higher education institutions in the country, Fu Jun University, and the education departments of Chinese People's University and Yanjing University gradually merged into Beijing Normal University. The famous historian and educator, Chen Huan was the president. Furthermore, new buildings were constructed at Beitaiping Village outside the New Street Corner. In the original site of the Fu Jen University, the chemistry department of Beijing Normal University was established. The entire campus occupied 1,034 acres.

**f** ...

Since 1952, the scale of the school continued to expand. The quality of teaching continued to improve. Scientific research was developed rapidly. In 1966, there were over 5,700 students.

Beijing University has always been paying alot of attention to the "overall development of morality, wisdom and physical fitness" and "being examples to the students." This has an important effect on stimulating the students to love and devote themselves to education. For example, those who graduated during the "May 4th" movement era, such as Zhou Yuzhou, Zhou Gucheng, Chen Jinming, Zhang Zuoren, Chen Junyin, Xu Yinchao, and Meng Giongwu have been working on the line of education for over 60 years. They have given all their energy and knowledge to their own students and have become famous scholars and educators in our country. In the ten year period of chaos, Beijing Normal University was seriously damaged. It stopped accepting students for 7 years. The teaching staff members were dismantled. The buildings and equipment were destroyed. The quality of teaching dropped.

After the "Gang of Four" was crushed, especially after the Third Central Committee meeting of the Eleventh Party Congress, the wrong was corrected and the normal teaching order was established. The quality of teaching was gradually increasing. The outlook of the school has made alot of changes.

Currently, the entire school has 15 departments and 21 special fields. The school system is 4 years.

Education Department

School Education Special Field

Preschool Education Special Field

Psychology Department

**Psychology** Special Field

Chinese Language and Literature Department

Chinese Language and Literature Special Field History Department

History Special Field

Philosophy Department

Philosophy Special Field

Political Economics Department

Political Economics Special Field

Foreign Language and Literature Department

English Language and Literature Special Field

Russian Literature and Language Special Field

Japanese Language Special Field

Mathematics Department

Mathematics Special Field

Physics Department

Physics Special Field

Nuclear Physics Special Field

Radio Electronics Department

Radio Electronics Special Field

Astronomy Department

**ENTER ENTER EN** 

Astronomy Special Field

/38

Chemistry Department Chemistry Special Field Biology Department Biology Special Field Biochemistry Special Field Geography Department Natural Geography Special Field Physical Education Department Physical Education Special Field In addition, there is 1 independent library science special field.

Physics laboratory at Beijing Normal University.



In 1980, there were 4,120 undergraduate students, 231 special /37 students, and 273 graduate students. Currently, the university has 2,908 faculty and staff members; among them, 1,460 are teachers. Of the teachers, thère are 55 professors, 100 associate professors, 844 lecturers, 422 assistants, 36 teachers, and 3 engineers.

In recent years, Beijing Normal University strengthened its scientific research work and obtained very encouraging results. In the natural science area, items such as the basic principle and application of ion implantation, cell damage kinetics, theory and quality assessment of ecology, macromolecular light sensitive materials, quantum chemistry, mathematical logic, multi-band intensity meter and nuclear magnetic resonance field meter, and computer Chinese character information processing have reached

advanced levels in our country. In 1978, there were 18 items receiving the awards from the national science meeting and the scientific committee of Beijing. In the social science area, a number of high quality publications have been written; i.e. ((papers on Child Psychology)), ((History of Chinese History)), and ((Symposium on Social Literature)).

The school places emphasis on learning advanced technology from abroad. It is actively engaged in international culture exchange. On one hand, well known scholars and professors from abroad are invited to teach or lecture at the University. On the other hand, professors and lecturers have been sent abroad to visit, study, and attend technical meetings. Through these activities, the friendship and interaction with foreign students have been improved. Teaching and scientific research have been promoted.

Gymnasium of Beijing Normal Univeristy.



Beijing Normal University has 3 affiliated high schools, 1 experimental elementary school, and 1 experimental kindergarten to be used as the site to study secondary and primary school education.

The publications include ((Journal of Beijing Normal University)) (with a social science edition and a natural science edition), ((Status of Education Abroad)), ((Russian Literature)), ((Communication in Mathematics)), and ((Teaching Foreign Language in Elementary and Secondary Schools)). The library currently has over 2 million volumes of books (of which approximately 350 thousand are foreign books). There are over 6,000 Chinese and foreign periodicals (of which about 2,400 are foreign periodicals).

/39

Beijing Normal University occupies 1,034 acres. Presently, the school building area is 230 thousand square meters.

During the thirty years after the Liberation, Beijing Normal University has trained over 14,000 undergraduate students, 1,600 graduate students and special students. The majority of them has become the backbone in the education front. They have contributed actively toward the education career of our country.

> School Anniversary Date: December 17 Secretary of Party Committee: Nie Jusun

## BEIJING FOREIGN LANGUAGE INSTITUTE

SALAND STRATES

School Address: Weigong Village, Hai Dian District, Beijing

The predecessor of Beijing Foreign Language Institute was Yan An Foreign Language School.

Before the founding of Yan An Foreign Language School, in order to meet the requirements of the situation developed in the anti-Japanese war, a Russian team was established in September of 1941 in Yan An Anti-Japan Military and Politics University. Later on, it became the Russian team at Yan An Military Academy. In May of 1942, the Russian Department at Yan An University merged into the Russian team and Yan An Russian School was established. In early 1944, English was added. In September of the same year, Yan An Foreign Language School was officially established.

After the victory of the anti-Japanese War, part of the students and faculty went to the liberated area in the Northwest region. In 1947, the foreign language school of Northeastern Democratic Army Headquarters was put in place. In 1950, its name was changed to Harbin Foreign Language Training School. Another portion of the students and faculty went to Zhangjiakou and became the foreign language department in the school of arts at Huabai Consolidated University. In June of 1946, the foreign language college of Huabei Consolidated University was established. In

124

\`\`\`\`\```

1948, Huabei Consolidated University and Northern University merged to become Huabei University. The foreign language department in the second division at Huabei University was set up.

After the liberation of Beijing, on the basis of the foreign language department in the second division at Huabei University, Beijing Foreign Language School was founded. At that time, there were English and Russian. Later on, German, French, Spanish, and Romanian were gradually added. In 1951, the Russian department at Beijing Foreign Language School was consolidated into Beijing Russian Training School which was founded in October of 1949. In 1952, Russian Training School established a preparatory program for people going to Russia. In 1954, Beijing Foreign Language School changed to Beijing Foreign Language Institute. In 1955, the Russian department of Chinese People's University merged into the Russian Training School. In 1956, it was changed to Beijing Russian Language Institute. In September of the same year, the Polish and Czech special training programs at Beijing University were merged into the Russian Language Institute. A Polish and Czech department was established.

In February of 1959, Beijing Foreign Language Institute and Beijing Russian Language Institute merged. There were 5 departments /40 and 8 languages. Furthermore, an affiliated high school of foreign languages was also founded. In 1963, it was expanded into an affiliated foreign language school.

During the ten year period of chaos, Beijing Foreign Language Institute was severely damaged. It stopped accepting new students for 5 years. In 1971, it resumed recruiting. However, due to the interference and destruction of the "Gang of Four," various types of functions were still abnormal.

After the "Gang of Four" was crushed, Beijing Foreign Language Institute was restored and reorganized. The normal teaching order was gradually established.

Beijing Foreign Language Institute currently has 7 departments and 27 special fields.

English Department

English Special Field

Russian Department Russian Special Field French Language Department French Special Field Italian Special Field Spanish Language Department Spanish Language Special Field Portuguese Language Special Field German Language Department German Language Special Field Swedish Language Special Field Eastern European Languages Department Polish Special Field Czech Special Field Romanian Special Field Hungarian Special Field Bulgarian Special Field Serbian Special Field Albanian Special Field Asian and African Languages Department Japanese Special Field Arabic Special Field Vietnamese Special Field Laotian Special Field Cambodian Special Field Thai Special Field Malaysian Special Field Indonesion Special Field Burmese Special Field Sinhalese Special Field Hausa Special Field Swahili Special Field

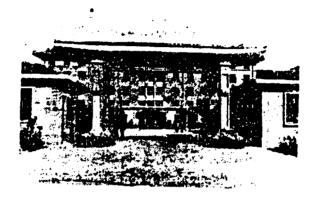
The Arabic Special Field and Thai Special Field are on a 5 year system. The remaining special fields are 4 years.

In 1980, there were 1,041 undergraduate students and 39 graduate students. In addition, there were 91 teachers in training.

Since 1979, under contract with United Nations Headquarters, every year it is training 25 simultaneous translators and interpreters for the United Nations.

The institute currently has 1,582 faculty and staff members; among them 764 are teachers. Among the teachers, there are 20 professors, 53 associate professors, 273 lecturers, 145 teachers, and 273 assistants.

The front gate and the main building of Beijing Foreign Language Institute.



The teaching work at Beijing Foreign Language Institute has received the support and assistance from our international friends. As far back as the founding of the school, foreign students working in the liberated region such as Ma Haite, Han Ding, Shike, Ge Lianhen (deceased), Ke Ruke, and Yi Shabai went to the institute to teach. The husband and wife team, Ke Ruke and Yi Shabai are still teaching in the institute. For several decades, they have devoted their energy to the training of foreign language people in our country. In 1979, the Ministry of Education officially retained them as consultants. After the Government was founded, the institute continued to retain many foreign teachers in China. According to incomplete statistics, the number reached several hundred. There are over 40 foreign experts and professors teaching at the institute at the present moment.

Beijing Foreign Language Institute has been particularly careful about improving the quality of teaching. It emphasizes

that teaching in the classroom must be done well, practical training must be strengthened, and the fundamentals must be solid. It not only empahsizes the overall training in practical talking and writing, but also has various classes in the spoken language, hearing, newspaper reading, writing, and translating in order to strengthen the overall teaching in hearing, speaking, reading, writing, and translating. In the meantime, it also notices the fundamental theoretical knowledge. It offers foreign language theories and other electives such as linguistics, phonetics, grammar, vocabulary, rhetoric, conversation linguistics, literary form, literature history, and situations in countries of languages studied (political structure, history, geography, culture, etc.). The students not only can master the spoken and written foreign language fluently, but also have a certain standard in foreign language theory and the fundamental knowledge of the culture and history of the country whose language is to be studied. The students are made to be foreign language specialists in morality, wisdom, and physical fitness. Every special field begins to have a second foreign language starting from the third year.

In addition to teaching in the classroom, according to the principle of "correlating theory to reality," students and teachers were organized to participate in various translation practices. After the founding of the institute, approximately over 1,000 students and 400 teachers participated in the translation of over 13 million words of materials in 20 languages, prepared subtitles for over 80 movies, and did other oral translation work.

Beijing Foreign Language Institute has always been particular about the building up of teaching materials. Since its inception, the teaching materials written have been used in over 100 high schools. In recent years, it has edited various teaching materials in English, French, German, Russian, and Spanish. They are recommended all over the country.

Editing and writing foreign language dictionaries is one of the research items at Beijing Foreign Language Institute. Since 1975, it has undertaken the task of editing 18 dictionaries.

As of this moment, it has already completed ((Chinese-English Dictionary)), ((Simple Spanish-Chinese Dictionary)), ((Dictionary of Chinese-Russian Idioms)), ((Spanish-Chinese Dictionary)), etc.

Beijing Foreign Language Institute has been actively involved in the study of methods in teaching foreign language. In 1956 and 1960, it has held two experience exchange meetings in teaching foreign languages. Teaching materials and teaching methods were analyzed and explored, and encouraging results were obtained.

In recent years, Beijing Foreign Language Institute opened up academic exchange activities with relevant institutions abroad. Scholars from the U.S., Australia, France, West Germany, and Japan have been invited to the institute to give lectures. In the meantime, teachers were sent abroad to study, visit, and promote the development of teaching and scientific research work.

The teaching equipment at Beijing Foreign Language Institute has been replaced and replenished. In recent years, a batch of advanced electrical teaching equipment was added. Modern audiovisual teaching techniques have been used to improve the quality of foreign language teaching. Currently, the electronic teaching building is under construction.

The library building of Beijing Foreign Language Institute occupies 4,000 square meters. It holds 460 thousand volumes of books; among them there are 260 thousand foreign books. About 300 foreign newspapers have been subscribed. In addition, all departments and major special fields have their own information rooms to collect, preserve, and organize various library materials needed in teaching and research. Currently, it is actively planning the building of a foreign language teaching information center. Its major duty is to collect, organize, and reproduce relevant foreign language teaching materials, such as textbooks, teaching reference books, research information on teaching methods, foreign language tools, and newspaper materials and academic publications related to the teaching and research in foreign language, in and out of the country. It should satisfy the needs of various foreign language departments in the northern region.

129

/41

It will also provide information for the teachers in foreign languages in college, high school, and elementary school.

There are 7 publications which include ((Teaching and Research in Foreign Languages)), ((Learning English)), ((Learning German)), ((Learning French)), ((Extracurriculum Studies)), ((Foreign Literature)), and ((Russian Literature)).

Beijing Foreign Language Institute also has a "Publishing Company in Foreign Language Teaching and Research." It has its own affiliated foreign language school, an elementary school and a kindergarten for the children of the staff.

Beijing Foreign Language Institute occupies 400 acres. The building area is over 90 thousand square meters. In addition, the electronic teaching building, under construction, has over 8,000 square meters in space.

Since 1949, Beijing Foreign Language Institute has trained over 13,000 undergraduate students, 80 graduate students, 150 students in translation classes, and 700 teachers who finished advanced study. It also trained over 12,100 students who were ready to study abroad and to leave the country as Chinese teachers. There have been 300 foreign students.

Over the many years, the institute also undertakes the task of teaching foreign language to the society. Before 1966, it offered foreign language courses for Beijing Evening College and was running English lessons for radio stations. In recent years, it has been undertaking the teaching duties for the English broadcasting on the Beijing Radio Station, the English lesson on the Central Television Station, and the English course in Broadcasting and Television University. In addition, the institute also trains technical personnel in foreign languages for related departments before they are sent abroad.

## BEIJING FOREIGN TRADE INSTITUTE

School Address: Hui Zhong Nunnery, Little Gate Outside An Ding Men, Beijing.

The predecessor of Beijing Foreign Trade Institute is Beijing Foreign Trade Special Training School. It was founded in 1953. Beijing Foreign Trade Special Training School was formed by merging /42

fr:A

the Higher Trade Cadre School originally in the Ministry of Commerce and the Foreign Trade Teaching and Research Office of the Central Finance College. In September of 1954, Beijing Foreign Trade Special Training School and the foreign trade special field in Chinese People's University were merged to form the Beijing Foreign Trade Institute. Not too much later, the special field of foreign trade in Shanghai Finance Institute was terminated. The teachers were transferred to Beijing Foreign Trade Institute.

Since its founding until 1966, Beijing Foreign Trade Institute had 4 departments and 11 special fields in the undergraduate program. The foreign trade department had a foreign trade economics special field. The Russian department had a Russian translation special field in foreign trade. The western language department had 5 special fields in foreign trade translation in English, German, French, Spanish, and Italian. The eastern language department had 4 special fields in foreign trade in Korean, Vietnamese, Japanese, and Arabic. In addition, at one time or another, the special fields in transportation and banking were offered. In the meantime, special classes, training classes, preparatory classes, short-term classes, and study classes were held.

Along with the continuing development of foreign trade education, the scale of Beijing Foreign Trade Institute is also continuously expanding. In 1960, the campus was moved from Qianma Chang on Jiu Gu Lou Street to Che Dao Gou, west of Beijing. In 1966, there were over 2,100 students and 719 staff and faculty members.

During the ten year period of chaos, Beijing Foreign Trade Institute was seriously damaged. In 1970, it was abolished. The school building was taken over. Part of the backbone faculty and staff members were transferred away from the school. Teaching equipment and library information were scattered. In 1973, the State Council approved the restoration of the Beijing Foreign Trade Institute. The school was relocated outside An Ding Men in Beijing.

After the "Gang of Four" was crushed, Beijing Foreign Trade Institute gradually returned to normal through restoration and

reorganization. The quality of teaching is improving every day and the research work has obtained new results.

Beijing Foreign Trade Institute currently has 4 departments and 12 special fields.

First Department

Foreign Trade English Special Field Second Department

Foreign Trade French Special Field Foreign Trade German Special Field Foreign Trade Spanish Special Field Foreign Trade Italian Special Field Foreign Trade Russian Special Field Foreign Trade Japanese Special Field Foreign Trade Arabic Special Field Foreign Trade Korean Special Field Foreign Trade Vietnamese Special Field

Third Department

Foreign Trade Special Field Fourth Department

Customs Management Special Field

The foreign trade special field is on a 5 year system. The remaining ones are 4 years. The first, second, and third departments have graduate programs.

In 1980, there were 857 undergraduate students, 49 graduate students and 78 special students.

The institute currently has 950 faculty and staff members; among them 490 are full time teachers. Of the teachers, there are 13 professors, 15 associate professors, 223 lecturers, 60 teachers, and 179 assistants. In addition, there are 12 foreign experts.

Since its founding, especially in recent years, Beijing Foreign Trade Institute has significant accomplishments in scientific research and teaching material construction. The books and articles published to date include: ((German Grammar)) and ((Fundamentals in German)), written by Professor Liao Fujun (deceased); ((Japanese-Chinese Dictionary)), edited by Professor Chen Tao: ((Simple Spanish Grammar)), written by Professor Zhang Wuxiong; ((Technical Japanese)), edited by Professor Wang Dajie;

((French-Chinese Dictionary in Trade)), written by Professor Zhang Zuyao; ((English Conversation)) (Volumes I and II), written by the English teaching material writing team; ((English Correspondence)) (trail edition), (Volumes I and II), edited by Associate Professor Zhuge Lin; ((Foreign Trade Policy and Practice in China)), co-authored by Professor Liu Chaojin and Associate Professor Wang Linsheng; ((Price Conditions in International Commerce)), written by Associate Professors Cao Bokang (deceased) and Yao Zhoujie; ((Import and Export in Foreign Trade)), written by Associate Professor Geng Datong, et al; ((Modern Japanese-Chinese Dictionary)), edited by Professor Song Wenjun; ((Lectures on Foreign Trade)), edited by the editing group on ((International Commerce Problems)); ((Actual Practice in International Trade)), edited by Associate Professors Li Xiaoxian, Qiu Nianzhu, and Feng Datong; ((Pocket German-Chinese Dictionary)), edited by the dictionary group of the German teaching and research office; and ((Spanish-Chinese Foreign Trade Dictionary)), edited by the dictionary editing group of the Spanish teaching and research office.

Currently, the institute has already established academic exchange activities with several foreign higher education institutions.

Since its founding in 1954, Beijing Foreign Trade Institute has trained over 4,400 undergraduate students, 393 special field students, 46 graduate students, and 89 foreign students. Since it was restored in 1973, it has trained over 400 people in the cadre training classes. Most of them have become the experts and backbones in the foreign trade business. They are contributing to the development of foreign trade.

/43

The institute has an international trade research institute. The research staff mainly consists of teachers in various special fields. There are also other research personnel from other teaching and research departments involved.

The institute is fully equipped with electronic teaching devices. It has various language laboratories and video cameras and recorders.

The library currently has 300 thousand volumes of books. Foreign books occupy 1/3, in which over 50 thousand are English books. There are approximately 50 thousand volumes in French. Japanese, Russian, Spanish, German, Italian, Arabic, Korean and Vietnamese. Over 50 thousand foreign books have been imported. The collection is concentrated on world economics, international trade, reference books, and foreign language teaching reference books. In the collection, there are over 5,000 rare books, 2,159 rare books in Chinese, and over 2,800 rare books in foreign languages. In books related to customs, it has the complete collection of the publications of the old Chinese Customs from the fifties in the nineteenth century to the eve of the Liberation, and the series of 1,408 books about China (Books on China) which was originally in the Customs Library. Currently, it is subscribing 739 periodicals and newspapers; among them, 205 are Chinese and foreign newspapers. There are 184 imported newspapers and magazines, primarily in economics, trade, and foreign language.

Beijing Foreign Trade Institute occupies 363 acres. Its building area is 430 thousand square meters.

School Anniversary Date: September 1st.

#### INTERNATIONAL RELATIONS INSTITUTE

School Address: Village on the Slope, Hai Dian District, Beijing.

/44

The predecessor of International Relations Institute was the Cadre School during the early stage of Liberation. In 1961, it was expanded as a branch campus of the Institute of Diplomacy. In 1965, it was changed into the International Relations Institute.

During the ten year period of chaos, International Relations Institute was seriously damaged. In 1970, it was forced into extinction.

After the "Gang of Four" was crushed, in 1978, International Relations Institute was rebuilt.

In recent years, International Relations Institute has been restored and developed at a relatively quick pace. Currently, it has 4 special fields in English, Japanese, French, and Russian. Other special fields have not yet been resumed. The school system is 4 years. In 1980, there were 219 undergraduate students, 16 graduate students, and 26 special students.

S. M. W. C. C.

International Relations Institute offers such mandatory courses as Marxism and Leninism, international relations, knowledge in foreign affairs, foreign languages, Chinese, and physical education, as well as some electives in literature and history. The students are required not only to have firm and accurate political directions, but also to be able to master the tool of foreign language, to have the basic knowledge of the world, to have the ability to observe and analyze international problems, and to have a relatively high standard in Chinese.

For courses in international relations and foreign affairs, in addition to the lectures given by full-time teachers, experts in foreign affairs and international problem studies are invited to give lectures. Sometimes, foreign experts are also invited to lecture so that the students can grasp the newest development in the international situations while they are studying international knowledge and international affairs.

Owing to the importance of foreign language in international affairs and in the study of international relations, the institute is very particular about foreign language teaching. The students are required to speak two foreign languages. Foreign language teaching is primarily focused on modern languages. On the basis of hearing, speaking, reading, writing, and translating, the training in conversational language is strengthened.

Currently, International Relations Institute is still in its re-building stage. Therefore, the scale is not large. Teachers are still being transferred into the school. Presently, it has over 100 full-time teachers, including 6 professors, 18 associate professors, and 45 lecturers. Among the professors, associate professors, and other teachers, many of them are well educated and have been devoted to teaching for a long time. Their teaching experience is rich. Some other teachers have been involved in international affairs and studies on international problems. They have certain practical experience. These older teachers are still teaching students and guiding graduate students on the front line. A number of middle-aged teachers, who have special training and lots of energy, have already become the backbone in

135

Contra - Ash Sales

teaching. In the meantime, several foreign teachers have been retained to perform teaching duties. In recent years, some teachers and graduate students have been selected to attend advanced courses, visit, and participate in technical meetings in and out of China.

International Relations Institute owns modern electronic teaching equipment. The collection of books increases rapidly in the library. Since its rebuilding over 2 years ago, over 40 thousand domestic and foreign books have been added. Currently, there are over 700 foreign and domestic periodicals.

The institute occupies 90 acres. It currently has over 50 thousand square meters in building area. Construction work is in progress to expand the buildings.

> School Anniversary Date: December 1st. Current President: Chen Zhongjin.

### BEIJING ATHLETIC INSTITUTE

School Address: Yuan Ming Yuan East Road, Hai Dian District, Beijing.

Beijing Athletic Institute was founded in 1953 on the basis of Beijing Normal Univeristy Department of Physical Education. During the initial stage, the name of the institute was Central Athletic Institute. In 1956, it was changed to Beijing Athletic Institute. It was under the jurisdiction of the National Athletic Committee.

Since its founding, Party and Government leaders such as Chou Enlai, Zhu Te, He Long, and so on have arrived at the school for inspection many times. They were very concerned about the construction and development of the institute.

When Beijing Athletic Institute was originally founded, the conditions were very poor. The faculty and students insisted on their hard working tradition and their diligent spirit and gradually built up a higher education institution in athletics. In 1953, only a two year special training program was offered. In 1955, the four year undergraduate program began. Since 1954, it began to accept graduate students. In 1957, the graduate /45

class was set up. In 1962, Beijing Athletic Institute had the department of physical education, the department of athletics, and a graduate research class. The students were developed to near 1,600.

During the ten year period of chaos, it stopped accepting new students for 6 years. In 1962, recruiting was resumed. The school system was 2-3 years.

After the "Gang of Four" was crushed, the school system was changed to 4 years in 1977. In 1978, the graduate student division was restored. The studying period is 3 years. The undergraduate program added a department of fundamental theory.

Presently, there is a physical education department, athletic department and a fundamental theory department, as well as 9 special fields. Furthermore, there is a competition athletic school.

Physical Education Department No special field

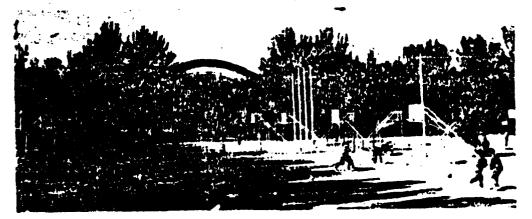
Athletic Department

Field and Track Special Field Swimming Special Field Ball Games Special Field Gymnastics Special Field

Martial Arts Special Field

Fundamental Theory Department Sporting Anatomy Special Field Sporting Physiology Special Field Sporting Medicine Special Field Sporting Biological Dynamics Special Field

A corner of the stadium at Beijing Athletic Institute.



In 1980, there were 1,618 students; among them 107 were graduate students and 6 foreign students.

The entire institute has 990 staff and faculty members; among them 438 are full-time teachers. Of the teachers, there are 35 professors and associate professors, 295 lecturers, and 108 assistants. There is 1 foreign expert. 47 people are taking up various duties in international and national athletic organizations.

The institute is very particular about building up the teaching force. The majority of the teachers have been selected from the graduates and they remained at the institute to teach. For example, Sunkeyi, Zhao Yaping, Yu Xinlu, and Qin Chunlin, who broke the national records in the 3,000 meter obstacle race, heel-and-toe walking race, decathlon, and 800 meters, remained to teach at the institute. Famous archery experts Li Shulan and Xu Kaicai, who broke many world records, also undertook some /46 teaching work. In order to continuously improve the quality of teaching, in addition to organizing teachers to sit in theoretical courses, academic activities such as "fundamental theory seminars," "technical lectures," and "information and experience exchange" were frequently held. Furthermore, "advanced class for young teachers," "short-term training course," "foreign language evening school," and "Japanese study class" have been held. In order to fully utilize the effectiveness of older teachers, teaching groups using older teachers as the backbone are widely formed to combine the old and the young.

Since its founding, Beijing Athletic Institute gradually developed its good school spirit. The faculty and students study seriously and work hard. They are particularly serious about correlating theory to reality. They are very practical. The quality of the teaching and research level have been improving continuously.

In 27 years, it has trained over 7,000 students and nearly 300 graduate students. In addition, it has raised 74 foreign students for 8 countries in Asia, Africa, and Europe. Among these graduates, those who stayed to become teachers include 62 international and national referees, 181 first class referees,

138

and over 100 athletes. For example, the famous track and field athletes, who had broken national records, Zhou Lianli, Ling Shiqian and Cui Linj, and the women's 1,500 meter champion in the Asian Olympics, Song Meihua; those who broke the world women's archery record many times, Song Shuqian, Meng Fanai, and Huang Shuyan; major power in the national women's volley ball team Cao Huiyin, Yang Xi, Chen Zhaodi; and major power in women's basketball team Tianjin, Shan Ruirong, have been graduates and students of youth training teams and Beijing Athletic Institute. The world record holder in the women's high jump, Zheng Fongrong and the lightweight weight lifting record holder Chen Jinkai also have studied at Beijing Athletic Institute.

Beijing Athletic Institute emphasizes the combination of education in school as well as outside school. Using the forms of education practice and physical education assistance, mass sporting activities were initiated in factories, mines, and industries so that physical education can directly serve the construction of our country. Specifically aimed at the characteristics of various types of work, different production exercises were prepared. They were welcomed by the people. Furthermore, many training classes were held for factories, villages, and schools to train over 130 thousand teachers and backbones in physical education.

Over the years, the institute has been working hard toward the direction of combining teaching, training, and research together. In the areas of "the experimental study and morphology of a sprained ligament on the foot," "study on the cross-section of human muscle," "study on the effect of jumping on arch and meta tarsal bones," "study on the effect of Tianqi and Ginseng on improving the body and increasing the athletic ability of athletes," and "the development and application of musculargraph," it has reached certain achievements. The "telemetric heart rate transmitter of athletes" developed by Jia Binghuai and the "corresponding swimming speed meter" developed by Mei Zhengyao received awards in the national science meeting.

In order to meet the needs of Four Modernizations in our country, in recent years, Beijing Athletic Institute has

Swimming pool in Beijing Athletic Institute.



scholars and professors have been invited to give lectures at the institute. In the meantime, a number of professors and lecturers were sent abroad for visits or to attend technical meetings. In addition, 12 excellent teachers were sent abroad for advanced study. Currently, it has already established academic exchange with 4 foreign universities.

Beijing Athletic Institute occupies 900 acres. The school building area occupies over 80 thousand square meters. It has 11 indoor training rooms for track and field, swimming, gymnastics, and various ball games, as well as over 50 outdoor playing fields. There are special electronic class rooms with color video recording and movie projection devices.

The library has collected over 240 thousand volumes, of which 18,000 volumes are foreign and Chinese books. In addition, there are nearly 500 kinds of periodicals (over 100 kinds of foreign periodicals).

140

The publications include ((Beijing Athletic Institute Journal)) and ((Reference Information on Teaching Physical Education)).

The affiliated organizations include a manufacturing and repair factory for athletic equipment, a printing shop, the school/medical center, and a kindergarten.

School Anniversary Date: October 1st. Current President, First Secretary

of Party Committee: Zhong Shitong.

# CENTRAL MUSIC INSTITUTE

School Address: Baojia Street, Xicheng District, Beijing.

Preparation of Central Music Institute began in late 1949. On June 17, 1950, it was officially founded at Tianjin.

Central Music Institute was founded by merging the music department in the school of arts at Huabei University, the music group at Lu Xun School of Arts in the Northeastern region, Nanjin National Music Institute and its affiliated youth class in Changzhou, the music department at Peiping Special School of Arts, Shanghai Chinese Music School, and the music department of Yanjing University. Many famous people in the music circle at the time, such as Lu Ji, Li Huanzhi, Li Yuanqing, Li Lin, Miu Tianrui, Yang Yinliu, Yu Yiqxuan, Jiang Dingxian, Zhang Hongdao, Yi Kaiji, Zhu Shiming, Liu Hengzhi, and Huang Yuanli, had participated in the teaching work.

In the initial stage after the founding of the institute, the scale of the school was not large. The special fields offered were also not complete. There were only 4 departments in music composing, vocal music, piano, and orchestra. There were affiliated music working groups and research organizations. In the orchestra department, there was a group (folk music group) specializing in traditional instruments. In addition, it gradually established its affiliated high school and elementary school. The music working group was moved to Beijing shortly after it was founded

One of the views in Central Music Institute - outside look of the auditorium.



142

/47

/48

63

and became the Central Singing and Dancing Group to be led by the Ministry of Culture (shortly after the founding of that group, it was divided into two; i.e. the Central Folk Music Group and the Central Song and Dance Group). After the research department was moved to Beijing, it was changed to Chinese Folk Music Research Institute for a while.

In the fall of 1958, Central Music Institute moved from Tianjin to Beijing. At that time, the school had already developed into a first class higher education institution in music with relatively complete special fields and better teaching quality. In addition to the original 4 departments, a music department and a conducting department were added. In order to develop Chinese music, a Chinese instrumental music department and a Chinese vocal music department were set up. The Chinese Music Research Institute was again under the leadership of Central Music Institute.

In early 1964, the departments of Chinese instrumental music and vocal music of the institute, as well as the Chinese Music Research Institute merged with the music department of the original Beijing School of Arts and became the Chinese Music Institute.

During the ten year period of chaos, Central Music Institute was seriously damaged. Normal teaching work and recruiting were stopped. Both faculty and student were sent to a lower level in the fields. The institute was facing the serious situation of complete disintegration.

After the "Gang of Four" was crushed, the Ministry of Culture announced the restoration in name and in organization of Central Music Institute in December of 1977.

Since its founding, under the leadership of the Party, significant accomplishments have been made in various areas through the hard work of faculty and students. It has gradually developed its own characteristics in the areas of training the students in overall skills and fundamentals, strengthening the actual practice of the art for teachers and students, developing the spirit of "open minded discussion" academically, and expanding the teaching and research in folk music. In the past thirty years, Central Music Institute has built up a team of teachers with a certain academic standard and rich experience in teaching. It not only has a number of various older professors, but also has a group of middle age-aged backbone teachers. Some of the teachers have already become famous theoreticians, composers, singers, and performers. They have made beneficial contributions to the education in music.

In thirty years, Central Music Institute has trained 1,223 college students, 230 special students, 5 graduate students, 1,200 middle level students, and 20 foreign students in total. Many graduates have already made important contributions to the society. For example, in the area of music theory, Yu Renyang, Huang Xiangpeng, Li Quanmin, Wang Yuhe, Zheng Bonong, and Li Chunguang; in the area of composing Wu Zugiang, Guo Shifu, Xin Huguang, Shi Wanchun, Tian Feng, Mei Li Qi Ge, Liu Wenjin, Chu Wanghua, Zheng Ziufeng; in the area of conducting Zheng Xiaoyin; in the area of vocal music Guo Shuzhen, Li Xinchang, Ye Peiyin, Luo Qizu, Li Shuangjiang, Su Fengjuan, Li Xian, Liang Meizhen, Wen Zhenping, Wang Kaiping, Deng Yun; in the area of orchestra instruments Sheng Zhongquo, Lin Yaoji, Hu Guoyao, Chen Jiamin; in the area of piano Liu Shikun, Yin Chengzong, Guo Zhihong, Li Qi, Bao Hui Qiao, Xie Dagun; in the area of national instruments Liu Tehai, Wang Guoton, Zhen Yunqing, Hu Zhihou are the backbones in the culture department.

The important products of the students and teachers when they are at the institute include: orchestra music ((Symphonic Poem of Yida Plum Forest)), ((Festival Overture)), ((Sing for the Snow)), ((Youth Symphony)), ((Moon Light Over Twin Springs)) (rewritten for an orchestra); ballet ((Mermaid)), ((Red Women's Army)); piano concerto ((Youth Concerto)), ((Children of the South Sea)); pipa concerto ((Little Sisters on the Praire)); chorus ((Chorus of Fai Hu Mountain)), ((Chorus of the Anti-Imperialism Storm)); and traditional instrument music ((Rhapsody of Shanxia Gate)), ((Describing Northern Henan)), ((Five Brave Men on Wolf Teeth Mountain)), and ((Beautiful Zhuangjin)). As results of the teaching experience and research performed by the faculty at Central Music Institute, teaching materials and academic publications, which have been or will be published, include: ((Music Form and Work Analysis)) by Wu Zuqian, ((Song Writing)) by Su Xia, ((Course in Harmony)) by Wi Shikai, ((Methods to Use Traditional Instruments)) by Xu Yocan, et al, ((Fundamentals in Musical Theory)) by Li Chonguang, ((Foreign Music History)) by Zhang Hongdao, ((Ancient Chinese Music History)) by Jin Wenda, and ((Outline of Chinese Modern Music History)) by Wang Yuhe. The important translations include: ((The Art of Music)) by Yu Renjang, ((Harmony of the Twentieth Century)) by Liu Liwa, etc. In addition, large amounts of selected teaching materials have been published for the playing and performing special fields.

After the "Gang of Four" was crushed, in 1977, a special recruiting system was practiced to evaluate talents based on an overall consideration in wisdom, morality, and physical fitness. There were approximately 17,000 youths who entered the entrance examination for Central Music Institute. The scale was the largest ever. There were so many talented people. It had a great effect in and out of the nation. Under the leadership of the Party, the faculty, staff, and students of the institute overcame many difficulties to reorganize the teaching order and to improve the quality in teaching. Currently, a number of highly talented students have emerged. They were highly praised by the music societies in and out of the country.

Central Music Institute currently has 8 departments and 17 special fields.

Composing Department

Composing Special Field

Technical Theory in Composing Special Field

Music Department

Chinese Music History Special Field

Foreign Music History Special Field

Traditional National Music Theory Special Field Conducting Department

Chorus Conducting Special Field

Band Conducting Special Field

Traditional National Instrument Department Wiredrawing Music Special Field Plucking Music Special Field Wind Instrument Music Special Field Percussion Instrument Music Special Field Symphony Instrument Department String Music Special Field Wind Music Special Field Percussion Music Special Field

/49

test

Piano Department

のために、

Piano Playing Special Field Vocal Music Department

Opera and Concert Singing Special Field Opera Department

Opera Special Field

The study system for the 5 departments in composing, music, conducting, vocal music, and opera is five years. The program in the three departments in traditional music, piano, and symphony music is four years. Since 1979, it began to accept graduate students in a two-year program. In addition, there are cadre study classes and teacher training classes. Its affiliated high school has four special fields in traditional instruments, symphony instruments, piano, and theory. With the exception of the three year special field in theory which is on the high school level, the study period is six years. The affiliated high school has its own affiliated elementary school.

The institute also has a creation and research office. It is responsible for new creations, research, and editing and translaitng foreign music information.

In 1978, there were 329 undergraduate students and 239 students in the affiliated high school and elementary school.

It currently has 529 faculty and staff members; among them 253 are full-time teachers. Of the teachers, there are 17 professors, 29 associate professors, 117 lecturers, 42 teachers, and 48 assistants. The library has a collection of over 200 thousand articles, including over 130 music books and music scores and over 140 Chinese and foreign records.

The publications include: ((Journal of Central Music Institute)) and ((Reference Information on Foreign Music)).

In the recent two years, the institute has strengthened its cultural excha.ge with foreign countries. It has officially retained some well-known experts and scholars from abroad to give lectures and to teach. In the meantime, it has sent teachers abroad to visit and lecture according to a plan. Students have also been sent abroad to perform and to attend international music competitions. Moreover information exchange has been established with some universities in some countries.

> School Anniversary Date: June 17. Current President: Zhao Pei

## CENTRAL ARTS INSTITUTE

NAMES OF DESCRIPTION OF DESCRIPTIONO

WANTER 1 STATUS

School Address: Xiaowei Lane, Dongcheng District, Beijing.

The predecessor of Central Art Institute was National Peiping Special Training School of Arts which was founded in 1918.

Due to the promotion of Liang Qichao, the first National Beijing School of Arts was established on April 15, 1918 at the former Jingji Avenue in Xicheng District, Beijing. There were two disciplines in painting and design. The first president was Zheng Jin. In August of 1921, it added a teacher training class. In 1923, its name was changed to National Beijing Special School of Arts. It had 3 departments in Chinese painting, western painting, and design. In August of 1925, it was changed into a special school for arts. Two departments in music and drama were added. In the fall of 1927, it merged with other universities to form the National Peiping University. The special school in arts was changed to the special department of arts in Peiping University. The music and drama departments were terminated. It was further divided into men's and women's divisions. After the Northern Expedition in 1928, it was changed to Peiping University School of Arts. In addition to the 5 departments in Chinese painting,

foreign painting, practical arts, music, and drama, a department of architecture was added. In 1930, it was changed to a professional training school in the arts. However, due to oppositions, the change was not implemented. Later, it was changed into a special training school in arts. In January of 1934, Peiping Special School of Arts was officially founded. It had 3 divisions in painting (with 2 groups in Chinese painting and western painting), carving and moulding (with 2 groups in carving and moulding), and design (with 2 groups in pattern and design).

After the "July 7th" incident in 1937 the special school of arts was relocated to Gulin in Jiangxi. After the fall of Nanjing, it moved up the Yongtze River through Hanko to Yuanlin in Hunan. In 1938, it merged with Hangzhou Special School of Arts to become the National Special School of Arts. In January of 1939, it was moved to Kunming through Guiyang. In 1941, it was relocated to Pine Forest Hill in Bishan, Xichuan. In the summer of 1943, it was moved to Panxi in Chongqing. After the victory of the anti-Japanese war in August of 1945, the special school of arts was moved back to Peiping.

(ter)

In August of 1946, Xu Beihong was retained as the president of the special school of arts. Xu went to Peiping through Shanghai and met with Chou Enlai and Guo Moro. He was encouraged by Chou Enlai. After Yu Beihong became president, he widely retained talents. The personnel selected not only had high standards, but also good political attitudes. He had hired many well known people in arts to teach at the school. They included Zi Baishi, Ye Qianyu, Li Keran, Li Kuchan, Wu Zuoren, Ai Zhongxin, Feng Faji, Dong Xiwen, Li Zongjin, Li Hua, Wang Linye, Hua Tianyu, and Gao Ya. At that time, Peiping Special School of Arts had a painting section (divided into a Chinese painting group and a oil painting group), engraving section (divided into moulding and engraving groups), pattern design section and craft section (with a ceramic group). Later on, a music section was set up.

In Peiping which was under the control of Nationalist Party Counter-revolutionaries, despite the large strength of reactionaries on campus at the special school of arts, the students and faculty

148

members still carried out numerous resisting struggles under the leadership of the Party underground. Furthermore, they also organized some activities such as wall posters and chorus. The special school of arts was one of the original intitating organizations participating in the anti-hunger, anti-civil war signature campaign on May 20, 1947. Professors such as Xu Beihong, Fen Faxing, Gao Ya, Wu Zuoren participated in the parade together with other progressive students and faculty members. On July 9, 1948, they were actively involved in supporting the anti-suppression, anti-slaughtering movement organized by students from the Northeastern Region. Part of the students and faculty members were arrested and issued warrants for their arrest.

and the second

くいくいかく

On the eve of Liberation, Xu Beihong organized the movement to resist moving to the south. He changed the emergency committee which was organized by the reactionary authority into the welcoming organization for Liberation. Some students were recruited to participate. Xu Beihong, as a "well-known figure in the society," gave advice to Fu Zuoyi in a meeting called upon by Fu to protect the antiques and ancient sites and to promote the peaceful Liberation of Peiping. In order to prepare for the Liberation of Peiping, the underground Party organization and progressive professors such as Li Hua, Ye Qianyu, Zhou Linzhao, etc. risked their lives to engrave wooden blocks to print fliers.

In November of 1949, the music department of the special school for arts was moved to Tianjing. It was merged into the National Music Institute. In December of the same year, Huabei Consolidated University School of Arts and Literature Department of Arts was merged into Beijing Special School of Arts. A number of well known artists, such as Gu Yuan, Yan Han, Luo Gongliu, Wang Shiguo, Wang Chaowen, Cai Yi, Hu Yichuan, and Wu Lao, together with the artists at Beijing Special School of Arts worked closely to plan the founding of National Arts Institute.

In the winter of 1949, Xu Beihong wrote to Chairman Mao and asked him to inscribe the name of National Arts Institute which was to be founded. Chairman Mao personally replied to the letter and wrote "National Institute of Arts" for him. Xu Beihong also requested to Primier Chou to send the students and teachers to /50

the countryside to participate in land reform. After the request was granted, the vast students and faculty dashed to the outskirt of Beijing to join the great land reform campaign.

In early 1950, the Ministry of Political Affairs of the Central People's Government officially approved the founding of a national arts institute. Its name was determined to be Central Arts Institute. A celebration meeting was held on April 1. Guo Moruo, Zhou Yang, Shen Yanbing, etc. were there to express their congratulations.

Xu Beihong was the first president of Central Arts Institute. At that time, there were 270 students and 187 faculty and staff members; among them 68 were teachers.

In September of 1954, Xu Beihong died of illness. Jiang Feng succeeded him as the president.

In 1952, the arts institute began to plan to build a craft institute. In 1956, the practical arts department was moved out and officially set up as the Central Institute of Crafts. In September of 1955, the 3 divisions of oil painting, color and Chinese ink painting, and engraved plate painting in the painting department were reorganized into 3 departments. In January of 1958, the department of color and Chinese ink painting was changed to the Chinese painting department. In 1957, the department of art histroy was established.

During the ten year period of chaos, Central Institute of Arts was seriously damaged. It stopped recruiting students for 9 years. The damage was tremendous.

After the "Gang of Four" was crushed, the institute was restored and reorganized. The policy of the intellects was executed. Normal teaching order was established. The quality of teaching continued to improve.

Currently it has 6 departments. The study period is 4 years. Chinese Painting Department

(not further divided into special fields)

Oil Painting Department

(not further divided into special fields) Engraved Plate Painting Department

(not further divided into special fields)

Carving and Engraving Department

(not further divided into special fields)

Art History Department

Chinese Art History Special Field Foreign Art History Special Field Artistic Theory Special Field Cartoon and New Year Painting Department

(not further divided into special fields)

Each department has a graduate program. The study period is 2 to 3 years.

In 1980, there were 126 undergraduate students, 18 graduate students, and 12 foreign students.

The entire institute currently has 367 faculty and staff members; among them, 146 are teachers. Among the teachers, there are 16 professors, 28 associate professors, 74 lecturers, 21 teachers, and 7 assistants.

The faculty and students of Central Institute of Arts have always been emphasizing creation of art work. Many pieces of art work were created to satisfy the need of the society. In the meantime, the teaching duty was also fulfilled. The Chinese and oil paintings of Wu Zuoren, the figure paintings of Ye Qianyu and Jiang Zhaohe, the scenery paintings by Li Keran, and the large freehand brush Chinese painting by Li Ruochan have received good reviews by the crowd. ((Chairman Mao Traveling All Over The Country)) by Li Qi, ((Ceremony of the Founding of the Government)) by Dong Xiwen, ((Bloody Clothing)) by Wang Shiquo, ((Tunnel Warfare)) by Luo Gongliu, and ((Liu Hulan)) by Feng Faji have been excellent pieces created in coordination with the practical situation. The engraved plate painting by Gu Yuan, Li Hua, Yan Han, Wang Qi, and Huong Yunyu are not only shown in newspapers and magazines, but also published in personal collection volumes. In the aspect of sculpture, important sculptures in the National Hero's Monument in Tian An Men Square in the Capital, the Revolutionary Military Museum, the National Culture Palace, Auditorium of the Political Association, and Chairman Mao's Memorial were creations participated in by the faculty and students.

151

The publications of the institute include ((Study of Arts)) and ((Arts in the World)).

In 1978, an arts exhibition hall was established on the basis of the original exhibition room. It was open to the public in 1979. In addition to a collection of paintings by the graduates, it also has quite a few teaching references such as paintings of scenery flowers and birds, views, and the human body. Moreover, there are some porcelin and bronze objects. Furthermore, it also has some paintings donated by the collector and art historian, Sun Peicang.

Exhibition Hall at Central Institute of Arts.



The library currently has over 130 thousand Chinese and foreign books; among them over 20 thousand volumes are foreign. There are 208 kinds of periodicals.

Central Institute of Arts has an affilaited high school of arts, which recruits junior high school graduates with certain specialties. The school system is four years.

In addition, there is a sculpture creation room. Besides carrying out sculpture creations in combination with teaching and research, it also accepts the tasks of sculpture creation by external organizations.

Central Institute of Arts occupies 50 acres. Presently, it occupies 15,000 square meters of building space.

In the past thirty years, since its founding, it has trained a total of 863 undergraduates, 91 graduate students, 253 short term training class students, and 57 foreign students from over 30 countries. Many graduates have already become the backbones in art work.

Honorary President: Wu Zuoren Current President: Jiang Feng Secretary of Party Committee: Chen Pei

## CENTRAL INSTITUTE OF NATIONALITY

School Address: Baishiqiao Road, Hai Dian District, Beijing Central Institute of Nationality was founded on June 11, 1951. /51

Students of Central Institute of Nationality on campus.



On November 24, 1950, the Central People's Government Ministry of Political Affairs passed the ((Trail Plan for Establishing the Central Institute of Nationality)). The duties of Central Institute of Nationality were specified as to "train high and middle level cadres to develop the political, economic, and culture constructions in minority nationality regions, and to organize the editing and translating work of minority nationality languages." Through active planning, the school was officially opened in June of 1951. Zhu Te, in the opening ceremony, called upon the students of various nationalities to devote themselves to the various constructions for our country. Wu Lanfu was the first president.

In the initial stage, it had a military and political cadre training class and a Tibetan language class. In 1952, the research division, political science department, and nationality language

department were set up one after the other. In the political science department, a philosophy special training class and a Marxism and Leninism study class were added. In 1954, a cadre training class was held. In the nationality language department, over 20 nationality language special fields were set up. In view of the fact that the development of culture and education in minority nationality areas was not balanced, a preparatory class was set up in 1953. In addition, it also held medical preparatory classes, meteorology classes, geology and geography classes, and electrical engineering classes which were equivalent to the middle special school level. In 1956, the history department was founded. It had national history and nationality special fields. Soon afterwards, a nationality research class was set up. In order to train special people in nationality arts, a national dance training class was held in 1958. In 1959, the department of arts was founded. It had 3 divisions in dancing, music, and art. In 1964, on the basis of the Chinese language special field in the nationality language department, the Chinese language department was founded. Until 1965, Central Institute of Nationality had already developed to 5 departments and 33 special fields. There were 2,780 students in school.

/52

During the ten year period of chaos, Central Institute of Nationality was seriously damaged. It stopped recruiting for 5 years. It was resumed in 1971. However, the teaching order was abnormal and the quality of teaching was lowered.

After the "Gang of Four" was crushed, the institute was restored and reorganized. In order to suit the need of the Four Modernizations to train minority teachers in mathematics and science and to develop fundamental theoreticians in natural sciences, a department of mathematical physics was established in 1978.

Central Institute of Nationality currently has 6 departments and 24 special fields. The study program is four years.

Political Science Department

Political Theory Special Field Political Economics Special Field Philosophy Special Field Political Law Special Field Minority Nationality Language Department Mongolian Special Field Tibetan Special Field **Uigurian Special Field** Korean Special Field Kazakh Special Field Yi Special Field Ancient Tibetan Special Field Tujue Special Field Chinese Literature Department Chinese Language and Literature Special Field History Department National History Special Field Mathematics and Physics Department Mathematics Special Field **Physics Special Field** Arts Department Vocal Music Special Field Symphony Music Special Field National Music Special Field

National Music Special Field Keyboard Music Special Field Theoretical Composing Special Field Chinese Painting Special Field Oil Painting Special Field Dancing Special Field

In addition, there are the cadre division and preparatory classes.

In 1980, there were 1,741 undergraduate students, 244 special students, 450 cadre training students, 137 preparatory class students, 24 graduate students, 92 advanced study students, and 85 evening college students. Among the students, 97.4% of them were minority nationality students.

The institute currently has 1,673 faculty and staff members; among them 697 are full-time teachers. Among the teachers, there are 10 professors, 41 associate professors, 333 lecturers, 197 teachers, and 116 assistants. Of the research personnel, there are 2 more professors, 9 associate professors and 23 lecturers. Among the faculty and staff, 29.4% are minority nationalities.

Central Institute of Nationalities has always been stressing the importance of scientific research work. In the early fifties, it had organized several survey groups to carry out investigations in the regions where minority nationalities lived. They initiated the research work to identify the nationalities. In the middle fifties and the early sixties, according to the instruction of the Party Central and the State Council, it organized several hundred teachers to participate in a survey of the social history and languages of all the minority nationalities in our country. Reports over a hundred million words had been prepared. These reports are precious information in studying the general patterns of the development of society in our country, as well as in exploring the special patterns of our social development. They have actively contributed to the identification of various nationalities, the creation and reform of minority languages, and the writing of brief introductions to the history, language, and self-ruling situation of minority nationalities. From 1958 to 1978, the institute published 33 books, including: ((The Minority Nationalities in China are Advancing)), ((Tibetan Grammar)), ((Problems Concerning) the Correct Pronunciation in Mongolian)), ((Chinese-Tibetan Dialogue Dictionary)), and ((History of the Islam Religion)), (five of them were assisted by relevant organizations). In 1979, 59 books and papers such as ((History of the Primitive Society)), ((Comparative Study of the Miao Language)), ((Social Economic Systems of Minority Nationalities in China Before the Liberation)), ((Dalar and Banchan)), ((Experiment on the Tone of Lhasa Dialect in Tibet)), ((Chinese-Jin Dictionary)), ((Wa-Chinese Dictionary)), ((Chinese-Yi Dictionary)), ((Introduction to the Language and Document of Ancient Uiguran)), ((Minority Nationalities in China)), ((History of the Hui Nationality)), ((History of the Manchu Nationality)), ((History of the She Nationality)), ((History of the Zhuang Nationality)), and ((Comments on Nationality Problems by Premier Chou)), were published (13 were written with assistance by other organizations).

In order to satisfy the development of scientific study on the minority nationalities, the institute currently has graduate

programs in nationality study, nationality language study, nationality arts and literature. It is currently planning on minority economics and Tibetan research programs.

The publication includes ((Journal of Central Institute of Nationality)).

The library currently has over 700 thousand books. There are over 80 thousand volumes in over 20 minority nationality languages. There are 28 newspapers and magazines published by minority nationalities.

Students of the History Department at Central Institute of Nationality looking up information in the library.



The institute has its own affiliated printing shop, hospital, kindergarten, elementary and high school.

Central Institute of Nationality occupies 461 acres of land. The building space is close to 130 thousand square meters.

Since its founding, it has trained over 15,000 minority graduate students from 55 minority nationalities. It has also developed 290 graduate students, 127 advanced study students, and over 200 foreign students.

> School Anniversary Date: June 11th. Current President, Secretary of Party Committee: Jiang Yuan

CITY OF TIANJIN

NANKAI UNIVERSITY



School Address: Balitai, Nankai District, Tianjin

Nankai University was founded in 1919. It was planned and prepared by Yan Fansun (Minister of Education in the Late Qing Dynasty) and Zhang Bolin (an enthusiastic educator all of his life).

In its initial period, there were 3 divisions in literature, science, and business and 12 departments in education psychology, history, political science, economics, philosophy and social science, mathematics, chemistry, physics, biology, common business, banking and accounting. Furthermore, there were preparatory classes. In September of 1920, the division of mining was added. In the fall of 1926, it was terminated due to lack of funding. In 1929, the divisions were changed to schools. In 1931, it added schools of economics and science. It also gradually established the department of electrical engineering, department of chemical engineering, and the medical preparatory class.

Nankai University, at the time, retained a number of famous professors and scholars to teach there. For example, Ling Bing, Jiang Lifu, Qiu Zongyue, Rao Yutai, Yang Shixian, Situ Yuelan, Li Jitong, Zhang Kezhong, Xu Mo, He Lian, Fang Xianting, Huang Yusheng, Chen Xujing, and Li Zhouming, as well as Professors Fan Wenlan, Zhu Kezhen, Tang Yuntong, and Xiong Dashi also taught at Nankai University at one time or another.

Nankai University was known for its rigorous teaching, simple administration, and lively life. It emphasized the teaching of fundamental theories. In the meantime, it stressed rigorous scientific training of the students. It was paying special attention to developing students to emphasize theories as well as experimental operation and actual practice in the society. It supported the organization of students in extracurricular activities such as literature, athletics, and science in order to train the students.

Nankai University was more serious about studying the reality of the Chinese Society. The "Nankai University Development Plan" drafted in 1928 showed that "Chinese History and Chinese Society were to be used as the background and to resolve the problems of China was the objective." It was stressed that the Chinese situation was to be studied in combination with the reality in China. When the ambition of Japanese Imperialism against China was gradually made obvious, a "Manchu and Mongolia Study Association" was founded in 1927. It was later changed to Northeast Study Association." It actually carried out survey and study on the economy of the Northeastern Region and Japanese aggression. Furthermore, a textbook on ((Northeast Economic Geography)) was edited. It was used in Nankai High School to educate students about patriotism. In the same year, a social economic study committee was set up. In 1934, it was changed to the economic study institute. It had conducted a great number of social economic surveys. It edited publications such as Chinese import and export prices, merchandise exchange index, wholesale price index in Northern China, cost of living index for workers in Tianjin, and foreign exchange index of Tianjin. It had also published Chinese and English periodicals such as, ((Economics Weekly)), ((Journal of Political Economics)), and ((Nankai Society and Economics Quarterly)).

In 1932, the applied chemistry institute was established. It was divided into three divisions in chemistry, manufacturing, and inquiry. They were specialized to analyze various materials and to answer all the problems in the chemical industry.

After the "July 7th" incident, the Japanese Imperialists started the war to invade China. On July 29 and 30, Nankai University was bombed by Japanese airplanes. Most of the school buildings were burnt down. In September of 1937, Nankai University was moved to Hunan Changsha together with Beijing University and Qing Hua University. The three universities formed Changsha Temporary University. Since then, Nankai University became a National University (it was a private school whose fundings came primarily from donations). Not too much later, the Temporary University was moved to Yunnan Kunming. It was changed to National Northwestern Consolidated University. It had 5 schools in literature, science, engineering, law and business, and teaching. There were

159

19 departments in Chinese, foreign languages, philosophical psychology, history, physics, mathematics, chemistry, biology, geography, geology, meteorology, law, political science, economics, sociology, business, civil engineering, mechanical engineering, electrical engineering, aeronautical engineering, and chemical engineering. These were also special classes in telecommunication and mathematics. In addition, there was a preparatory study class. In the School of Teaching, there were 7 more departments in Chinese literature, English, history and geography, citizen training, mathematics, physics and chemistry, and education. Among the 190 plus professors at the Southwestern Consolidated University, many of them were first class experts and scholars.

The main lecture hall of Nankai University.



Some of them, such as Wen Yiduo, Zhang Xiyun, Wu Han, and Qian Ruisheng were also known warriors in democratic movements. /54

In this period, the economics institute of Nankai University was moved to Chongqin to continue the research work. From 1939 to 1945, it had accepted and trained 35 graduate students.

In July of 1942, Nankai University set up a frontier region humanity research office to carry out on-site investigations on the language, culture, and economic geography of minority nationalities in the frontier region in Yun Gui. In 1943, it published the ((Frontier Humanity)) magazine in Kunming. Until the school was restored in 1946, there were 3 volumes and 18 issues. In addition, there were three special publications. This work promoted the study on the border region and minority nationalities in our country. It was looked upon seriously by the academic community.

After winning the anti-Japanese war, Nankai University returned to Tianjin in August of 1946. The school buildings were rebuilt. On October 17, an opening ceremony was held to honor the restoration of the University.

Since its rebuilding to the eve of Liberation in 1949, Nankai University had 4 schools and 16 departments. The school of literature had 4 departments in Chinese literature, foreign language, history, philosophy, and education. The school of science had 4 departments in mathematics, physics, chemistry, and biology. The engineering school had 3 departments in mechanical engineering, chemical engineering and electrical engineering. The school of political science and economics had 5 departments in political science, economics, banking, accounting and statistics, and business management. In addition, there were organizations such as the economics institute, applied chemistry institute, and frontier humanity study office.

The vast faculty and students at Nankai University have an honorable revolutionary tradition. As early as the "May 4th" movement period, students and faculty members represented by Chou Eulai, who was a graduate of Nankai High School and the first class of Nankai University, were actively engaged in the great anti-imperialism patriotic movement.

After the birth of the Chinese Government Party of 1921, Nankai University student Yu Fangzhou was initiated into the Party by Li Dachao. In 1923, organizations of the Party and the Socialism Youth League were developed among the students. In 1924, the Party branch office at Nankai University was set up. After the "September 18th" incident in 1931, the vast students and faculty

161

members joined the campaign to resist the Japanese to save our country. In 1935, they participated in the student patriotic movement of "December 9th." During the war against Japan in 1945, students and faculty members of Southwestern Consolidated University were actively standing on the front line in the struggle to resist the Japanese and to oppose Chiang Kaishek. Four of the martyrs killed in the "December 1st" campaign in Kunming were students of Southwestern Consolidated University. During the liberating war, the students and faculty together with their counterparts in other institutions in Tianjin jointly initiated the climax of the revolutionary movement of anti-hunger, anti-civil war, and anti-suppression under the leadership of the underground Party. They were encountered by the opposition of the reactionary nationalist party which led to the bloody incident of "May 20th" in Tianjin. On the eve of Liberation, they were actively involved in activities to protect the University to prepare for their Liberation.

On January 15, 1949, Tianjin was liberated. Nankai University was given a new lease on life. In 1952, during the reorganization of the departments and schools for the entire nation, Nankai University was designated as an overall university. Before the reorganization, the department of political science and the department of philosophy and education were terminated. After the adjustment, the engineering school of Nankai University and Beiyang University were merged to become Tainjin University. The department of physics and department of chemistry in the school of sciences of Beiyang University, and the 3 departments in commerce, business management, and accounting in the school of finance at Jinquo University were merged into Nankai University. The entire university had 14 departments and 3 special training classes. Two more adjustments were made in 1954 and 1958. The special fields in commerce, business management, and accounting and statistics in the school of finance were taken away to become Tianjin Institute of Finance. In the reorganization, a number of teachers had been transferred from Beijing University, Qing Hua University, Yanjing University, Beijing Normal University, Beijing Sino-French University, and Shanghai Hujiang University. The strength of

teaching was reinforced. The teaching instruments and equipment were replenished. The buildings of Nankai University were constructed in Balitai. In 1958, it added the department of philosophy and department of geology and geography. In addition, special fields in mechanics, nuclear physics, and radioactive chemistry were also added. In 1965, the two special fields in nuclear physics and radiochemistry were transferred to Lanzhou University.

In the 17 years since the founding of the new China until 1966, Nankai University had a completely new look. Considerable experience had been acquired in the aspects of teaching systems and teaching methods. The quality of teaching, the ideological awareness of the students, the level of academic work, and the standard of health had been significantly improved. In 17 years, Nankai University had trained a total of over 10 thousand undergraduate students and 158 graduate students. The faculty team was also developed significantly. In 1951, there were 230 faculty members. In 1964, the number grew to 795. Many experts with special talents gave up good salaries and working conditions abroad to return to their homeland after overcoming many difficulties and came to teach at Nankai University. For example, Chen Tianchi, Wang Jitao, Cuizheng, Yan Zhida, Chen Rongti, He Guozhu, He Binglin, Chen Ruyu, and Zhou Yiliang were among them. In these 17 years, Nankai University also accepted 183 foreign students.

During the ten year period of chaos, similar to other universities in the country, Nankai University suffered a tremendous disaster. The damage done was especially serious. Recruitment was stopped for as long as 5 years.

After the "Gang of Four" was crushed, through restoration and reorganization, the teaching of fundamental courses was strengthened, the quality of teaching was improving gradually, and the atmosphere in the school was changed. The aggressiveness of the vast students and faculty and staff members had never been higher. Many elder teachers expressed their willingness to contribute the rest of their lives to the realization of the Four Modernizations. For example, President Yang Shixian not only led

the school work, but also guided the elemental organic chemistry institute. He has always insisted on scientific research. Professor Zheng Tianting works actively on the front line in teaching and research. He personally teaches graduate students and foreign students. Furthermore, he is the editor in chief of ((Chinese History Dictionary)). Also, he is undertaking the task of running the "teacher training class in the history of Ming and Qing Dynasties" which was entrusted to him by the Ministry of Education. The purpose was to develop teachers for other related institutions in our country. Young and middle aged teachers are also very energetic and they work very hard to try to catch up with their elders. The vast young students study very They are actively engaged in various academic study programs. hard. They combine the courses together with the present academic movement to carry out research and discussion.

In recent years, work in scientific research has been emphasized and strengthened. Research organizations have been Research teams have been reinforced and reorganized. restored. Currently, there are 286 full time research personnel. The accomplishments of the scientific research work are significant. From 1977 to 1979, there were 32 items receiving the scientific research accomplishment awards by the City of Tianjin. Among them, 5 projects obtained first class awards: principle of gear meshing, organic scintillating agent, new ion exchange resin, new method in specimen preparation of chromosome of cell division for plants, and Model K-l automatic titration microcoulomb meter. In the national science meeting in 1978, Nankai Univeristy received 28 awards. Under the guidance of Marxism, Leninism, and thoughts of Mao Tsztong, social science study and teaching material have built up and have reached some achievements. A number of special publications and teaching materials, such ((Socialist Political Economics)), ((Modern Chinese History)), ((Ancient Chinese History)), ((History of the Ming Dynasty)) (with punctuations), ((History of Ancient Chinese Economics)), ((Analysis of "Multi-national Companies")), ((Western European Common Market)), ((Introduction to Folk Arts)), and ((Brief History of Chinese Novels)), have been published.

The academic exchange activities between Nankai University and foreign countries have been increasing. It has already established contact with 15 universities, in which exchange agreements have been reached with 5 of them. Some foreign experts and scholars were invited to lecture. The school has sent some graduate students and teaching in training to study and visit in 11 countries. In addition, some teachers went abroad to participate in international academic meetings.

Nankai University currently has 11 departments and 24 special fields.

/55

Chinese Language and Literature Department

Chinese Literature Special Field

History Department

Chinese History Special Field

World History Special Field

Museuology Special Field

Philosophy Department

Philosophy Special Field

Sociology Special Field

Economics Department

Political Economics Special Field

World Economics Special Field

Economical Management Department

Economical Management Special Field (recruiting in 1981)

Law Department

Law Special Field

Foreign Language and Literature Department

English Literature Special Field

Japanese Literature Special Field

Russian Literature Special Field

Mathematics Department

Mathematics Special Field

Computational Mathematics Special Field

Computer Software Special Field

Control Theory Special Field

Physics Department

Ń

Physics Special Field (including 7 directions in theoretical physics, optics, solid state physics,

electronic physics, semiconductor physics, radio physics, and biophysics)

Chemistry Department

Chemistry Special Field (including 5 directions in organic chemistry, inorganic chemistry, analytical chemistry, physical chemistry, and macromolecular chemistry)

Biology Department

Zoology Special Field

Microorganism Special Field

Genetics Special Field

**Biochemistry Special Field** 

Plant Physiology Special Field

In addition, the school has a pre-med class.

In 1980, there were 3,727 undergraduate students, 234 graduate students, and 26 foreign students.

Currently, the school has 3,457 staff and faculty members; among them 1,242 are full time teachers. There are 43 professors, 51 associate professors, 675 lecturers, 75 teachers, and 398 assistants.

The independent research institutes in the school include: elemental organic chemistry institute, mathematics institute, molecular biology institute, economics institute, and history institute.

In addition, there are 8 independent laboratories in modern optics, solid state energy spectra, organic chemical structural theory, ion exchange resin, catalytic kinetics, entomology, and genetics.

The publications include ((Journal of Nankai University)) (including natural science edition and philosophy and social science edition), ((Research and Information on Economics)), ((Nankai History)), ((Historical Problems in Japan)), ((Russian Literature)), etc.

The library has collected 1.2 million books; among them there are 2,000 rare books and 1,500 kinds of local records.

The affiliated organizations of the school include: a chemical plant, a form, a printing factory, an affiliated high school and elementary school, kindergarten, and a health center.

Nankai University occupies 1,861 acres of land. The building space occupies 200 thousand square meters.

Honorary President: Yang Shixian Current President: Teng Xiongzao Secretary of Party Committee: Zhang Zaiwang

#### TIANJIN UNIVERSITY

School Address: Qilitai, Nankai District, Tianjin

The predecessor of Tianjin University was Beiyang University, which was founded on October 2, 1895.

Beiyang University was founded with the objective of learning advanced foreign scientific technology and training our own high level engineering technical personnel.

When Beiyang University was initially founded, it was named as Tianjin Beiyang Western School. The next year, it was changed to Tianjin College. The campus was located in Liong's Garden just outside Dayin Gate in Tianjin. In 1902, the school was moved to Xiqu in Tianjin and its name was changed to Beiyang College. After the 1922 revolution, the name had been changed a couple of times to Beiyang University and National Beiyang University. In 1928, because of the attempt to practice a college district system, it was changed to the Second Engineering School of National Peiping University. After the college district system was stopped in 1929, it was changed to National Beiyang Engineering Institute. After the eruption of the anti-Japanese war in 1937, it was moved west to Shanxi. Together with Peiping University and Peiping Normal University, they formed the Xian Temporary University. It was changed to Northwestern Consolidated University later. Soon afterwards, it formed Northwest Engineering Institute together with Northeastern University School of Engineering and Private Henan Jiaozuo Engineering Institute. After winning the war against Japan, the school was restored at its original site in Tianjin in 1946. It was named Beiyan University.

When Beiyang University was first founded, it had first class and second class programs and the system was four years in each program. The first class program was the undergraduate program.

It had 4 disciplines in civil engineering, machine manufacturing, mining and metallurgy, and law. The second class program was the preparatory class. The major courses were in mathematics, physics, chemistry, and foreign language. In 1902, the study period was changed to three years. The machinery manufacturing engineering department was terminated. In 1917, the disciplines and departments were reorganized. The law department of Beiyang University was transferred to Beijing University and the engineering school of Beijing University was switched to Beiyang University. In 1924, the machinery manufacturing engineering department was restored. In 1931, the electrical engineering department was newly established. In 1935, the preparatory program was terminated. The machinery manufacturing engineering /56 department was divided into two groups in mechanical and aeronautical engineering. The civil engineering department was divided into civil and irrigation engineering groups. Moreover, an engineering graduate study program was set up and began to accept graduate students. When the school was reopened in 1946, there were two schools in science and engineering. The science school had 4 63 departments in mathematics, physics, chemistry, and geology. The engineering school had 10 departments in civil engineering, irrigation, mining, architecture, electrical engineering, aeronautical engineering, mechanical engineering, chemical engineering, and textile.

and a second and a second s

When Beiyang University was founded, American scholar Ding Jiali (Charles D. Tenney) was the superintendent in charge of school affairs. In 1907, Ding Jiali resigned. He was succeeded by Chinese scholar Wang Shaolian. This was the beginning that Chinese people were in charge. During the tenure of Wang Shaolian, he had corrected the situation that existed when foreigners were in absolute control. The school affairs were reorganized. The quality of teaching was improved. When Wang Shaolian resigned in 1914, he recommended Zhao Tianlin to succeed him as the president. When Zhao Tianlin was in office, he used the four words, "seeking truth from facts" to encourage the students. They became the "school model." The presidents to follow included our famous mechanical engineer Liu Xianzhou, bridge expert Mao Yisheng, irrigation experts Zhang Hanyin and Li Shutian. During the initial period, the teachers at Beiyang University were mostly American scholars. After 1924, due to the fighting between warlords, Beiyang University was in funding difficulties. They gradually left the campus. At that time, there were more technically sound people in our country. Beiyang University thus retained our own experts to teach at the school. Very quickly Chinese scholars became the absolute majority in the teaching force.

The examination system at Beiyang University was very short. If someone failed the make-up test for a core course, he would have to remain one year behind. Considerable number of students were left behind or chopped out in each year. The dropout rate from entering the school to graduation was as high as 50-60%. The students were strictly required and trained. All the students worked hard and lived modestly. The teaching standard at Beiyang University was comparable to those at Harvard and Yale in the U.S. since its founding. Graduates of Beiyang University could go directly to the U.S. and enroll in graduate schools without taking any examination. Generally, the graduates of Beiyang University could work out very well in his own special field.

The students of Beiyang University not only studied hard, but also had high degrees of patriotic enthusiasm. At the key moments when our country was endangered, they marched forward and stood on the front line of any revolutionary struggle. In the "May 4th" campaign, Beiyang University students acted as they heard the news. They were excited to fight against the government which betrayed its people. In the "December 9th" movement to resist the Japanese and to prevent our country from extinction, Beiyang University students joined other students and organized a huge demonstration in Tianjin. Part of the students participated and organized the "Expanded Propaganda Group of Students from Beijing and Tianjin" and the "Pioneers of Chinese National Liberation", ("Ming Xian" for short). Under the leadership of the Chinese Communist Party, they actively opened up anti-Japanese activities to save the country. After the eruption of the anti-Japanese war, quite a few Beiyang University students joined the army. They went to anti-Japanese bases in Yan An and Tiahong Mountains and fought against the enemy. During the liberation war period, Beiyang University students

opened up a series of revolutionary struggles such as anti-hunger, anti-civil war, and anti-suppression under the leadership of underground Chinese Communist Party organizations. They fought against the fascist rule of the nationalist reactionaries.

Beiyang University had gone through over half a century of difficult times in the semi-feudal, semi-colonial old China. It had trained over 3,000 high level engineering technical people. These people had contributed to the building of mining, metallurgy, and civil engineering industries, to the research and development in mechanical, irrigational, and electrical engineering technologies, and to the inception of textile, petroleum, chemical engineering, and airline industries in our country. Many of them are internationally known scholars. A few of them have begun their revolutionary career very early. Our famous economist, Ma Yinchu, was a student of Beiyang University who went to the U.S. to study in 1907. An excellent member of the Chinese Communist Party and an outstanding activist, the famous commander of the Guangzhou Campaign, Zhang Tailei, was a graduate of the 1920 class in law. In the scientific research aspect, the first airplane engine was developed at Beiyang University in 1936.

The birth of the New China ended the difficult times of Beiyang University for over 50 years. It began a new era of development.

In order to restore and develop education, in September of 1951, the Ministry of Education submitted and was granted by the State Council, to merge Beiyang University with Hebei Engineering Institute (founded in February of 1903). The name was changed to Tianjin University. It was placed under the direct jurisdiction of the Ministry of Education of the Central People's Government. In the meantime, the aeronautical engineering department of Beiyang University was transferred to Qing Hua University. In 1952, all the departments in higher education institutions were reorganized. The departments at Tianjin University were further altered. In September, the metallurgical department and the metal group of the mining department of Tianjin University were switched to Beijing Steel Institute. The geology department was switched to Beijing Geology Institute. The coal mining group in the mining department was transferred to Beijing Mining Institute. The mathematics department and physics department were merged into Nankai University. In the meantime, the chemical engineering departments of Beijing University, Qing Hua University, Yanjing University, and Tong Shan Railroad Institute, the architecture department of Beijing Railroad Management Institute, and the engineering schools of Nankai University and Jin Gu University (i.e. Tianjin Business Institute) were transferred into Tianjin University. In 1955, the telecommunications department of Tianjin University was transferred to Beijing Post and Telecommunciation Institute. The irrigation and soil improvement special field in the irrigation department was transferred to Wuhun Irrigation Institute. The surveying special field in the civil engineering department of Tianjin University was transferred to Wuhan Survey and Drafting Institute in 1956. Until the end of 1956, Tianjin University had 7 departments in machinery, electric power

A portion of the Tianjin University Campus.



civil engineering, architecture, chemical engineering, textile, and irrigation.

/57

In 1958, Tianjin University was placed under the Province of Hebei. In the same year, the mechanical engineering department was divided into the first machinery department, the second machinery department and the third machinery department. It also added the mining engineering department. In 1956, Tianjin University Evening School was founded. On the basis of the four original departments in machine manufacturing, industrial electrification, chemical engineering, and architecture, 5 special fields in dye intermediates, chemical engineering machinery, electrical machinery manufacturing, industrial and civilian building construction, water supply and drainage were established. The Radio Broadcasting University was operated by the City of Tianjin. The courses in the 3 departments of mechanical engineering, electrical engineering, and chemical engineering were taught by the teachers of Tianjin University. In addition, Tianjin University together with Tianjin construction bureau, heavy industry bureau, electrical bureau, and first machinery bureau set up Tianjin Construction Research Institute with 4 laboratories in welding materials, chemical engineering machinery, instrumentation, and internal combustion engine, respectively.

In March of 1959, Tianjin University was placed under the jurisdiction of the Ministry of Education. In the same, in order to improve the quality of education, the original first machinery department was changed to machinery manufacturing department. The original second machinery department was changed to precision instrument department. The original third machinery department was changed to the power machinery department. The chemical engineering department was divided into organic chemical engineering and inorganic chemical engineering departments. The original architecture department and civil engineering department were combined into civil engineering and architecture department. The original electrical power department was changed to electrical engineering department. The original textile engineering department was transferred away and was set up as Hebei Textile Industry Institute (the present Tianjin Textile Institute). The original mining engineering department was transferred to Tangshan and became Hebei Mining School. In 1961, the original paper making special field in the department of chemical engineering was transferred to Hebei Light Industry Institute (presently, Tianjin Light Industry Institute). In 1961, according to the policy of "adjust, reinforce, fulfill, and improve," the departments and special fields of Tianjin University were further reorganized. In 1964, Tianjin

University had 7 departments in radio electronics, optics and precision instrument, machinery manufacturing, power and automation, civil engineering and architecture, irrigation, and chemical engineering, 1 fundamental course department, and 1 institute of internal combustion engine. There were a total of 28 special fields.

Party and country leaders such as Mao Tsetung, Chou Enlai, and Deng Xioping were very concerned about the building and development of Tianjin University. They personally visited the school and provided important instructions.

During the ten year period of chaos, Tianjin University was seriously damaged. It suffered tremendous losses. It stopped recruiting students for 5 years.

In 1971, recruiting was resumed. Nine new special fields in laser, electronic computer, television and telecommunication, semiconductor device and material, jet stream technology, ocean chemical engineerng, casting technology and equipment, forging technology and equipment, and ship building were established. Furthermore, it began to plan to set up 3 special fields in gyroscope instrument, electronic automatic control, and protection engineering. Chemical engineering machinery and chemical engineering were merged into the special field in chemical engineering machinery and equipment. Industrial and civilian building construction and architecture were merged to become the building construction special field. The entire school has a total of 38 special fields.

After the "Gang of Four" was crushed, through several years of restoration and reorganization, Tianjin University appears to be alive again. Work in teaching and research has obtained accomplishments.

Tianjin University presently has 13 departments (including two preparatory groups) and 44 special fields. The program is four years.

Mechanical Manufacturing Engineering Department

Mechanical Manufacturing Technology, Equipment and Its Automation Special Field Metallurgy and Thermal Treatment Special Field

Welding Special Field Casting Special Field Forging Special Field Precision Instrument Engineering Department Timing Instrument Special Field Optical Instrument Special Field Laser Special Field Precision Instrument Special Field Electronic Engineering Department Radio Technology Special Field Semiconductor Physics and Device Special Field Electronic Instrument and Measuring Technology Special Field Computer Science and Engineering Department Electronic Computer Special Field Computer Software Special Field Chemical Engineering Department Basic Organic Chemical Engineering Special Field Macromolecular Chemical Engineering Special Field Intermediates and Dye Special Field Chemical Engineering Machinery Special Field Electrochemistry Special Field Chemical Engineering Special Field Chemical Engineering Catalysis Special Field Radiation Chemical Engineering Special Field Technical Ceramics Special Field Chemical Engineering Corrosion and Corrosion Protection Special Field Thermal Physics Engineering Department Internal Combustion Engine Special Field Engineering Thermal Physics Special Field Electric Power and Automation Engineering Department Industrial Automation Special Field Electric Power and Its Automation Special Field Industrial Automation Instrumentation Special Field Electrical Engineering Special Field System Engineering Special Field

Civil Engineering Department

Construction Structure Engineering Special Field Heating and Ventilization Special Field Water Supply and Drainage Special Field Architecture Engineering Department Architecture Special Field Irrigation Engineering Special Field Irrigation and Hydroelectric Engineering Construction Special Field Harbor Construction Engineering Special Field Offshore Oil Construction Engineering Special Field Ship Engineering Department Ship Engineering Special Field Industrial Engineering Department

Industrial Engineering Management Special Field Funadmental Sciences Department

Applied Mathematics Special Field

Applied Physics Special Field

Applied Mechanics Special Field

Technical English Special Field

In 1980, there were 5,352 undergraduate students, 215 graduate /58 students, and 15 foreign students in school. There are 5,061 faculty and staff members, among them 2,102 are full-time teachers. In the teachers, there are 61 professors, 215 associate professors, 1,119 lecturers, 254 teachers, and 453 assistants.

Tianjin University is especially particular about scientific research work. Before 1966, more than 50% of the professors and associate professors, about 50% of the lectureres, and part of the assistants were actively involved in scientific research. In 1956, it held the first scientific symposium. There were 88 papers presented for discussion. Over 670 people were invited as representatives from Tianjin and out of town. From 1961 to 1965, it had completed 49 research projects and finished with 157 research reports and papers. From 1977 to 1979, it had completed 162 projects of scientific research and finished 444 academic papers. In the 1978 national science meeting, Tianjin University received 36 research accomplishment awards. In 1979, it received 4 first class awards and 16 second class awards in research accomplishments in the City of Tainjin. In 1980, it received 2 first class awards, 5 second class awards, and 7 third class awards.

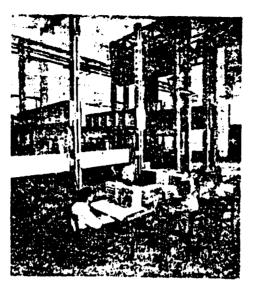
المالية المالي

Currently, Tianjin University is in the process of further developing scientific research activities. It has already made significant progress and obtained results in anti-shock characteristics of steel reinforced concrete structure, design and economic proof of the pushing fleet, operation research study, effect of impurity on the interface between silicon and silicon oxide, study of n channel MOS large scale g' memory integrated circuit, study of solar energy heating building, periphery equipment of computers - plasma display, study of high compression diesel engine, exploration of applying laser technology to internal combustion engine testing, application of laser to precision measurement, application of computer to the analysis of the stability of electric power systems under impulse loads, study of earthquake resistance of a gravity dam at Ertan and the pressure regulating well for an arch dam, special distillation techniques, study of the characteristics of the motion of various machine tools, and robots.

In order to suit the needs of scientific research, Tianjin University has already set up and is in the process of establishing several scientific research organizations. Currently, it has already established the Architecture Design Institute, the Material and Structure Analysis Center, and the Computer Center. Presently, it is in the process of setting up 14 laboratories in internal combustion engine, laser and applied optics, dynamic characteristics of machinery, analytical instruments and process monitoring devices, structural theory, system engineering, energy, chemical engineering, materials science, electronic engineering, architecture theory, architecture history, etc.

For thirty years since the founding of our government, Tianjin University has trained over 35,000 undergraduate students and 300 graduate students. Most of them have already become the backbones on the front line of science and technology in our country. In addition, it has raised over 100 students for 9 foreign countries.

The test to determine the destruction mechanism of the shear resistance strength of steel reinforced concrete beams was carried out at the Structure Laboratory in the Civil Engineering Department at Tianjin University.



In recent years, Tianjin University has intensified international academic exchange activities. The representatives of educators and universities from many countries arrived at the University for a tour. Tianjin University also sent responsible personnel and professors abroad to investigate the education system as well as to participate in international academic meetings. In addition, a certain number of teachers are being sent abroad each year to study or to give lectures.

Tianjin University operates six plants in machinery, automation equipment, precision machinery, electronic instrument, semi-conductor device, and macromolecular materials. Primarily, they undertake the tasks of student practice and research product fabrication. In addition, they also accept some product fabrication and processing work from external organizations.

In addition, Tianjin University has an affiliated high school, kindergarten, and health center.

The library buildings is 10,400 square meters. It collects over 760 books, among them 600 thousand volumes are Chinese and 160 thousand volumes are foreign. There are over 6,000 kinds of Chinese and foreign magazines and periodicals. The total volume exceeds over 90 thousand. The school occupies 2,000 acres of land. The building area occupies 320 thousand square meters. Honorary President: Li Shusen

Current President: Shi Shaoxi Secretary of Party Committee: Hu Bansheng

12.3



The library of Hebei University contains 1.12 million volumes

In the meantime, the management of teaching and scientific research has been strengthened. Moreover, a number of excellent teachers were sent to study at higher education institutions and research organizations in the country in order to absorb some beneficial experience to promote the teaching and scientific research work.

The publication is Journal of Hebei University.

The library currently has 1.12 million volumes; among them are nearly 270,000 Chinese and foreign books. There are 1600 kinds of newspapers and magazines.

The university has an electrical plant, a printing plant and a kindergarten. In addition, there are chemical plants and bilogical pharmaceutical plants operated by the departments.

Hebei University occupies 704 acres. The present building area is 150,000 square meters.

School Anniversary date: September 15 Current President and Secretary of Party Committee: Zhou Xuebie

/59

HUABEI ELECTRIC POWER INSTITUTE School Address: Qingnian Road, Baoding, Hebei /60

Huabei Electric Power Institute (originally Beijing Electric Power Institute) was founded in 1958 on the basis of Beijing Electric Power Institute. It was placed under the jurisdiction of the Department of Water and Electricity.

Toward the end of 1960, the economy of our country encountered some difficulties. Under difficult living and eating conditions, the faculty and students of Beijing Electric Power Institute insisted on devoting themselves to the laboring work for school construction simultaneously to teaching and studying. With their hard working spirit, they repaired and built the playground and the swimming pool. This accelerated the progress of school building construction.

During the initial stage, there were three departments in power engineering, electrical engineering and power plant chemistry. Under these departments, there were five special fields in power plant thermodynamic equipment, automation of power plant thermodynamic processes, power generating plant power network and power system, manufacturing of electric machinery and electric devices and power plant chemistry. The program was five years.

In September 1961, the students and faculty members of the special fields in power generating plant electric network and electric system, and high voltage technology, and economics and organization of the power industry of the electrical power department of Harbin University were merged into Beijing Electric Power Institute. The special fields were increased to seven

In July 1962, the first batch of graduates began to become technical personnel in the electrical power industry.

In September 1962, it added the special field in relay protection and automation of the electric system. In 1964, the number of undergraduate students reached 1324. In the same year, the Department of Water and Electricity transferred all the students and faculty members in the power plant chemistry department and the



A view outside the gate of Huabei Electric Power Institute

high voltage technology special field at Beijing Electric Power Institute to Wuhan Water and Electricity Institute.

During the 10 year period of chaos, Beijing Electric Power Institute was seriously damaged. At the end of 1969, it was relocated from Beijing to Yuecheng Dam in the Ganchan area in the province of Hebei. In June 1970, it was placed under the control of the province of Hebei. Because of the lack of conditions locally to run an electric institute, it was moved to the city of Baoding in October of the same year. Furthermore, the name was changed to Hebei Electric Power Institute. The faculty and staff members worked very hard under crude conditions for less than two months to prepare for the recruitment of three-year students in December. It had power and electrical power departments. It was further divided into four special fields in power plant thermodynamic equipment, thermodynamic measurement and automation of power plants, power generating plant and electric power system and electric system relay protection and its automation.

In order to satisfy the development in the automation and modernization of the electrical power industry, and to raise special people to master electric system communication, computation technology and mechanical processing and design, the electrical system communication special field was added in September 1976, the electric power mechanical processing special field was added in September 1978 and the computation technology and computer applications special fields were set up in September 1979. In November 1977, with the approval granted by the State Council, it began to accept undergraduate students for four-year programs. In October 1978, it was changed to Huabei Electric Power Institute. It was placed under the jurisdiction of the Department of Electric Power.

Huabei Electric Power Institute, among the institutions training high level technical people in electrical power, is a school with relatively complete special fields. Certain experience has been explored and accumulated in teaching and research, as well as in the building of the teaching force, teaching materials and laboratories by the power engineering and electrical engineering departments and their special fields.

Huabei Electric Power Institute currently has four departments and seven special fields. The program is four years.

Power Engineering Department

Electrical Power Plant Thermodynamics Special Field Electrical Power Plant Thermodynamic Measurement and Automation Special Field

Electrical Power Engineering Department

Power Generating Plant and Electrical Power System Special Field

Electrical System Relay Protection and Automation Special Field

Electronic Engineering Department

Electrical Power System Communication Special Field Computational Technology and Computer Applications Special Field

Mechanical Engineering Department

Electrical Industry Mechanical Processing Special Field In addition, there are a fundamental department and a teacher /61 training class.

In 1980, there were 1316 undergraduate students in school.

In 1978, with the approval of the State Council, the school was running the Huabei Electric Power Institute Beijing Graduate Student Division together with the Electrical Power Research Institute using the original buildings belong to Beijing Electric Power Institute. Currently, it has 146 graduate students.

The institute currently has 866 faculty and staff members; among them 359 are teachers. Of the teachers, there are two professors, 15 associate professors, 161 lecturers, 84 teachers and 97 assistants.

In recent years, the institute has paid a lot of attention to teacher training. Three lecturers and one associate professor were selected to perform scientific research work in foreign countries as visiting scholars. Five lecturers, two associate professors and one assistant have been chosen to be advanced students to be sent abroad. Over 30 young and middle aged teachers were sent to key universities to study. Over 120 people have attended various new teaching material seminars and lectures given by visiting foreign scholars. About one-third of the faculty members studied foreign languages, engineering mathematics and computers in the institute. The knowledge of the teaching force in the aspects of fundamental theory, foreign language level, and new sciences has improved rapidly.

In the area of editing teaching materials, it was in charge of five courses and co-editing two courses. Most of them have been published by Electrical Power Industry Publishing Company.

In the aspect of scientific research, between 1970 and 1980, it had completed 73 research projects, including the utilization of new energy resources, geothermal power generating techniques, direct current power transmission techniques, electric system relay protection and automation techniques, technologies related to the electrical power plant thermodynamic process automatic control and the design of a large hydraulic medium frequency tube bending machines, etc. 22 items were included in the national research plan. 3 projects received the scientific research accomplishment awards in the National Scientific Meeting, including the design of a large scale hydraulic tube bending machine, geothermal power generation (the hot water diffusion method), and the boiler electric contact water meter.

The research organizations have five laboratories in high voltage direct current transmission, relay protection and automation

of electrical systems, electrical power plant thermodynamic measurement and its automation, energy resources and environmental protection. Currently, there are 48 full time research personnel. Among them, there are 25 assisting personnel.

The publications include Journal of Huabei Electric Power Institute and Information on Electric Power Abroad. They are published randomly. The school has established information exchange contacts with over 1100 organizations in the nation. Furthermore, it has collected over 52,000 volumes of information.

The library has over 220,000 Chinese and foreign books, out of which there are nearly 40,000 volumes of foreign books. There are 667 kinds of periodicals.

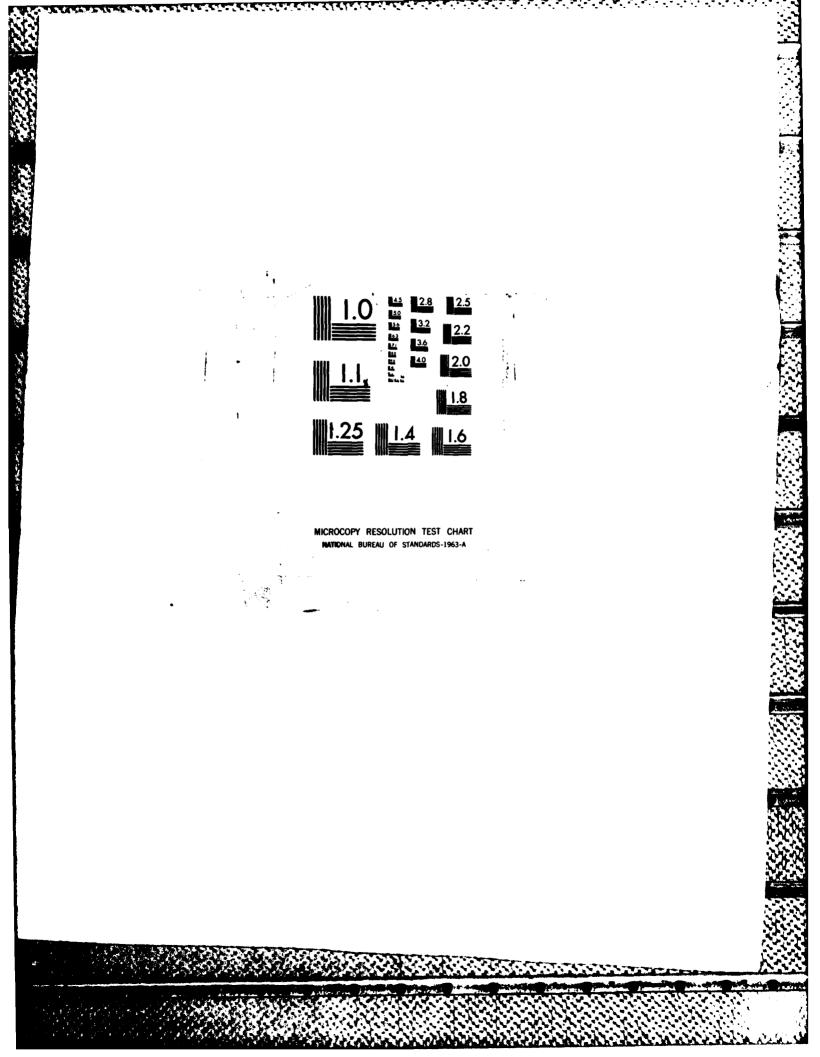
The institute has its own factory with over 60 pieces of equipment such as lathes and forging machines. Annually, it produces 1683 small 3917.6 kW generators and 200 one-ton hoists. Each semester it is capable of accepting over 200 students to practice. The factory, in coordination with the research people, has designed and produced the electrical control and measuring part of a 6000 ton hydraulic machine. It also completed the design for the simplification of the mechanical transmission device of a 12 meter horizontal boring machine. It has produced the electrical automatical control cabinet.

Huabei Electric Power Institute occupies 255 acres of land. The building space is over 50,000 square meters.

In 22 years since its founding, Huabei Electric Power Institute has developed 2924 undergraduates, 15 graduate students and four foreign students. It has trained 171 advanced study classes and teacher training classes.

> School Anniversay date: November 1st Current President and Secretary of Party Committee: Liu Qifu

HD-R137 587		BRI CHI 12	BRIEF INTRODUCTION TO HIGHER EDUCATION INST China(U) Foreign technology diy wright-pati 12 Jan 84 FTD-ID(RS)T-1082-83							FITUTIONS IN FERSON AFB OH		3/	3/9	
UNCLAS									F/G 5/9 NL					
				197						2 <b>9</b> 7			2	
	e.					-		1 <sup>1</sup>						
				÷	P)					3 <b>485</b> 4				
								1				£1		
						1				. Notes				
4 <sup>10</sup>														
							100000.001							
~							A. A					7		





THE PROVINCE OF SHANXI

SHANXI UNIVERSITY

School address: Wucheng Road, Taiyuan, Shanxi

Shanxi University was founded in 1902 (the 28th year of the Qing emperor Guangxu). It is a comprehensive university in literature and science with a relatively long history.

In 1902, the governor of Shanxi in the government of the Qing Dynasty planned to establish Shanxi College at Wenyin Lake in Taiyuan. In the same year, the British government negotiated with the Qing government to use the Shanxi local reparation in the 1901 indemnity as the fund to organize a Chinese Western College. The preparation work was entrusted to an Englishman Litimotai. Soon afterwards, Shanxi College and the Chinese Western College were merged into Shanxi College. The original Shanxi College was operating on a Chinese system, while the original Chinese Western College was operating on a western system. In 1904, Shanxi College built its new campus in Hojia Lane in Taiyuan (currently, the Taiyuan Normal Special Training School). Both the Chinese and western systems moved into the new facility at the same time. The Chinese system was called the advanced division. The western system was divided into four disciplines in law, mining, science and engineering.

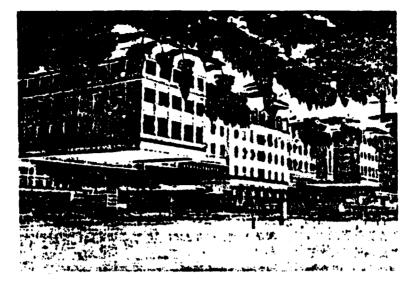
After the 1911 Revolution, Shanxi College was changed to Shanxi Institute. The Chinese and western systems were abolished. Instead, three disciplines in literature, law and engineering were established. Later on, the literature discipline was developed into Chinese and English. The law discipline was developed into law and political science. The engineering discipline was developed into civil engineering, mechanical engineering, mining and electrical engineering. In 1931, Shanxi University underwent a relatively large reorganization. The name of the school was changed to Shanxi University. The three disciplines in literature, law and engineering were changed to the school of Literature, School of Law and School of Engineering, respectively. All the subjects were changed into departments. In 1935, it added

/62

the School of Sciences which had mathematics and physics departments. Before the anti-Japanese War, Shanxi University had four schools in literature, law, sciences and engineering. Under them, there were 14 departments in Chinese literature, English literature, history, economics, political science, mathematics, physics, mining, civil engineering, metallurgy, mechanical engineering and electrical engineering.

On July 7, 1937, the Japanese imperialists initiated the war of aggression against China. Shanxi University was evacuated to the south. The engineering and science schools were moved to Linfen. The law school was moved to Pingyao. The literature school was moved to Yuncheng. In winter of the same year, Taiyuan was lost to the enemy. All the counties in the southern region of Shanxi fell into enemy hands. Shanxi University was forced to stop offering courses. All the books and equipment were lost. In the winter of 1939, Shanxi University was restored in Sanyuan County in Shanxi. It restored the three schools of literature, law and engineering. Under these schools, there were six departments in history, law, economics, electrical engineering and civil engineering. A while later, Shanxi Private Chuanzhi Special Training School in Medicine was merged into Shanxi University and became a special field in medicine. In 1941, Shanxi University was relocated to Qiulin in Yichuan, Shanxi. In 1943, Shanxi University became a national university instead of a provincial university.

After winning the war against Japan, Shanxi University was moved to its original campus at Hojia Lane in Taiyuan in March 1946. It had four schools of literature, law, engineering and medicine. Under them, there were seven departments in history, foreign languages, education, law, economics, electrical engineering and civil engineering (the medical school was not further divided into departments). Not too much later, the nationalist reactionaries insisted on the anticommunist, anti-people policy and started the civil war. Furthermore, they were extremely cruel against the cultural and educational institutions. They persecuted progressive students and teachers. In order to resist the persecution of the spy organization of Yan Xishan



Lecture Hall area at Shanxi University .

against progressive students and teachers, part of the students and faculty members left Taiyuan on the eve of liberation and moved to Beijing. Before the liberation, there were only over 400 students left at Shanxi University. Less than 100 faculty and staff members were on campus. There was a shortage of books. The equipment was also very crude.

In the history during the period of over a half century before our liberation, the students of Shanxi University always stood in the front of any struggle; from the "mine dispute" in Shanxi in the late Qing Dynasty to the famous "May 4th movement"; from the "struggle against property tax" in Shanxi before the war against Japan to the "struggle to protect the school" against the reactionary action of moving the university to the south on the eve of the liberation, they have contributed greatly to the various patriotic and democratic student movements.

On April 24, 1949, Taiyuan was liberated. Shanxi University obtained a new lease on life. Since then, under the leadership of the Chinese Communist Party and the People's Government, Shanxi University became a new socialist university. This signaled the end of the semi-feudal and semi-colonial education. It had an engineering school, a literature school (later changed to a teaching institute), a science school, a law school (later changed to a finance institute) and a medical school. The president was Professor Deng Chumin.

VILLE OF STA

In 1951, Shanxi Private Mingxian Institute was merged into Shanxi University School of Engineering. In 1952, the departments in all the higher education institutions were reorganized. In 1953, the School of Science of China University was merged into Shanxi University. The Law Department in the Law School at Shanxi University was merged into Beijing University. The finance institute was transferred to Chinese People's University. Toward the end of 1953, all the schools in Shanxi University became independent institutions one after another. The engineering school became Taiyuan Engineering Institute, the medical school became Shanxi Medical Institute and the Teaching Institute merged with the science school and became Shanxi Normal School. In the same year, Shanxi University ceased to exist.

In 1959, based on the need of socialist economic construction, Shanxi University was rebuilt with the approval of the Shanxi Provincial Committee and the Higher Education Department. In 1961, the newly created Shanxi University was merged with Shanxi Normal Institute to become a comprehensive Shanxi University in literature and science.

During the 10 year period of chaos, Shanxi University was severely damaged. The quality of teaching dropped significantly.

After the Gang of Four was crushed, thoughts were liberated. The wrongs have been corrected. Through restoration and reorganization, good results have been obtained in all aspects of work.

Currently, there are 14 departments and 28 special fields: Chinese Literature Department

Chinese Literature Special Field

Library Science Special Field

History Department

History Special Field

Archaeology Special Field

Philosophy Department

Marxism Philosophy Special Field Scientific Socialism Special Field

Economics Department

Political Economics Special Field Economical Management Special Field

Law Department Law Special Field (in preparation) Education Department School Education Special Field Foreign Languages Department English Special Field Japanese Special Field Arts Department Music Special Field Art Special Field Mathematics Department Mathematics Special Field Applied Mathematics Special Field Computation Mathematics Special Field Computer Science Department Computer Software Special Field Computer Application Special Field Physics Department Physics Special Field Radio Special Field Photo-electronic Physics Special Field Chemistry Department Chemistry Special Field Analytical Chemistry Special Field **Biology Department** Plant Physiology Special Field Entomology Special Field Microorganism Special Field Physical Education Department Physical Education Special Field In 1980, there were 4172 undergraduate students and 67 graduate students in school, which corresponds to 10 times that immediately after the liberation.

न्द्र द्वार का ब्रु

Currently, there are over 1700 faculty and staff members; among them 799 are teachers. Of the teachers, there are 14 professors, 33 associate professors, 460 lecturers and 292 teachers and assistants.

Sanxi University has developed more than 15,500 graduates since the liberation, which corresponds to 5 times the number of graduates in the 47 years before the liberation.

. .

The entire university has 15 research organizations, including the history institute, Chinese literature institute, Shanxi local history research office, Qing history research office, world history research office, modern Chinese writer's product study office, ancient writer's product research office, Shanxi local dialect study office, philosophy study office, Russian language and literature study office, education study office, laser research office, organic light conductor study office, environmental protection study office and computational technique study office. In the recent two years, the university has undertaken a total of 160 scientific research projects. Some of the projects have reached advanced levels. 32 items filled the blanks for the province of Shanxi and the nation. In the aspect of natural sciences, the accomplishments in two projects were given awards in the National Science Meeting. There have been 21 items receiving the provincial scientific research accomplishment awards. The study on fungus used in Chinese traditional medicine conducted by teachers in the Biology Department has received a lot of attention from the scholars in the U. S., Japan, Sweden, Norway, Canada, Belgium and Australia. The teachers in the Biology Department also coordinated with the irrigation departments of the cities and the province as well as the related fishponds to perform a study on the economic feeding of fish. They developed a method to breed rainbow trout at very low cost. The nation has already designated Shanxi as the key point in the country for breeding rainbow trout. The study on laser theory, particle physics theory and Chinese character coding, performed by the teachers in the Physics Department, has received attention by scholars in and out of the country. The result of the study carried out by the teachers in the Chemistry Department on chemical bonding theory has considerable reputation in the chemistry community in our country. The Chemistry Department has successfully tested the one step normal pressure method to produce ethylene carbosole using acetylene. The product has been determined to have reached an advanced level as compared to similar products in the country. The teachers in the Mathematics Department wrote some papers on fundamental theory. Some of them were presented in the national information theory conference and collected in the symposium volume.

190

In the aspect of special science, 21 publications have been completed in the recent two years. There have been over 260 papers. The university participated in editing 12 national teaching materials. 12 publications have been translated and 24 popular books have been written. Through scientific research, a great promotional effect on improving the quality of teaching and research has been realized.

The entire university currently has 55 laboratories. It owns a number of pieces of advanced equipment.

The library has collected over 810,000 books; among them there are 640,000 Chinese books and nearly 170,000 foreign books.

The publications include Journal of Shanxi University (divided into the philosophy and social science edition and the natural science edition).

The affiliated organizations include: physics workshop, printing plant, farm, affiliated high school, affiliated elementary school, kindergarten, hospital, etc.

Shanxi University occupies 566 acres of land. The building area is over 120,000 square meters, which corresponds to three times that before the liberation.

> Current president: Zhen Hua Secretary of Party Committee: Zhang Nianxian

Q.

## SHANXI AGRICULTURE UNIVERSITY

## School Address: Taigu County, Shanxi

The predecessor of Shanxi Agriculture University was Shanxi Agriculture Institute. Shanxi Agriculture Institute was built on the basis of the Private Mingxian Institute which was in existence before the liberation.

In 1907, Oberlin University in the U.S. opened Mingxian Elementary School in Taigu in memory of its alumni who lost their lives while preaching in Shanxi in the beginning of this century. The arrangement was made through one of its alumni, Kong Xiangxi, who was the Minister of Finance in the nationalist government. Later on, it gradually expanded into Mingxian High School. After the anti-Japanese War began in 1937, the students and teachers of Mingxian High School were moved to Yuncheng, Shaan Xian in Henan, Xian, and Min Xian in Shanxi. In 1939, it was relocated to Zengjia Village in Jintang County, Sichuan. In 1940, Mingxian Institute was founded outside the north gate of Jintang County. It set up subjects in farming, livestock breeding, agricultural engineering, mechanical engineering, chemical engineering and textile engineering. In 1946, Mingxian Institute was moved to outside the east gate in Chengdu. After Chengdu was liberated, Mingxian Institute and Mingxian High School were moved back to the original Mingxian High School site in Taigu from Chengdu. At that time, Mingxian Institute had six departments in agriculture, livestock farming, mechanical engineering, textile engineering, chemical engineering and business management. In January 1951, after the People's government took over Mingxian Institute and Mingxian High School, the departments were reorganized. The Mechanical Engineering Department was merged into Shanxi University School of Engineering (presently, Taiyuan Engineering Institute). The Textile Engineering Department was merged into Xian Polytech University. The Business Managerment Department was merged into Chinese People's University. The Agriculture and Livestock Farming Departments were expanded in Taigu. On October 1 of the same year, Shanxi Agriculture Institute was officially founded. The original

192

AN ENCOURSE AND A CONTRACTOR OF A CONTRACTOR OF A



President of Shanxi Agriculture University, Pig Farming Expert, Professor Zhang Longzhi, discussed the development of lean meat pigs with graduate students and undergraduate students.

Mingxian High School faculty and students were transferred to related high schools in Taiyuan. Taiyuan Shanxi Agricultural Technology Institute was placed under the jurisdiction of Shanxi Agriculture Institute. The name was changed to Shanxi Agriculture Institute Affiliated Agricultural School.

Since its founding on October 1, 1951, Shanxi Agriculture Institute was developed year by year. In 1958, along with the need of agricultural economic construction in Shanxi, Shanxi Agriculture Institute added two special fields in soil and agricultural chemistry and plant protection under the Agriculture Department. A veterinary medicine special field was added to the Livestock Farming Department, Furthermore, the Department of Horticulture was established. Under this department, there were fruit tree and vegetable special fields. The Affiliated Agricultural School was changed to a training school. In 1960, the Agriculture Department again added a special field in agricultural mechanization. At the same time, the Fundamental Department was founded. It had special fields in biophysics and fundamental theory. In 1962, the policy of "adjust, reinforce, fulfill, improve" was executed. After reorganization, Shanxi Agriculture Institute had three departments in agriculture, livestock and veterinary medicine, and horticulture, as well as a Fundamental Department. It had six special fields in agriculture, plant protection, soil chemistry, livestock, veterinary medicine and fruit and vegetable.

During the 10 year period of chaos, Shanxi Agriculture Institute was damaged. It stopped recruiting for five years. It resumed accepting students in 1972. The fruit and vegetable special field was further divided into the fruit tree special field and vegetable special field. In 1974, it added the forestry special field. The Horticulture Department was changed into the Department of Horticulture and Forestry. In 1975, under the influence of the so-called "meeting the farmer", Shanxi Agriculture Institute was "divided into four units". In addition, Dazhai Agriculture Institute, Yuncheng Agriculture Institute and Yanbei Agriculture Institute were established. Teachers, books and equipment were scattered all over. The order of teaching was messed up. The quality of teaching was lowered.

/66

After the Gang of Four was crushed, with the approval of the State Council, Dazhai Agriculture Institute was merged back into Shanxi Agriculture Institute. Yuncheng Agriculture Institute and Yanbei Agriculture Institute were also merged into it. The name of the school was changed to Shanxi Agriculture University.

In the 29 years since its founding, under the leadership of the party and the government, Shanxi Agriculture University has made significant changes in its outlook through the hard work done by the vast faculty and students. After the Gang of Four was crushed, especially after the Third Central Committee Conference of the 11th Congress of the Party, through restoration and reorganization, the school had accomplished a lot in various aspects.

In 1980, the departments in Shanxi Agriculture University were again reorganized. Currently, it has seven departments, one fundamental division and 11 special fields. The study program is four years.

Agriculture Department

Agriculture Special Field

Soil Chemistry Department

Soil and Agricultural Chemistry Special Field Plant Protection Department

Pl **n+** P<sup>\*</sup> .ection Special Field Horticult are Department

Fruit Tree Special Field

Vegetable Special Field

Forestry Department Forestry Special Field Forest Protection Special Field Livestock and Veterinary Medicine Department Livestock Special Field Veterinary Medicine Special Field Agricultural Machinery Department Agriculture Mechanization Special Field Fundamental Division Agricultural Economics Special Field

In 1980, there were 2677 undergraduate students and 40 graduate students in school.

The entire school has 1348 faculty and 480 staff members; among them there are eight professors, 15 associate professors, 238 lecturers, 21 teachers, 89 assistants and 109 acting assistants.

In order to satisfy the neels in teaching and research, Shanxi Agriculture University adopted an effective system to combine the outside with the inside. It combines staying with production and staying away from production to improve the teaching and research levels of the teachers. In the two recent years, three persons have been selected to study abroad. Over 60 people were sent to other institutions for advanced studies. In addition, a foreign language class and an advanced mathematics training class were held. In 1977, the university joined the work to edit the teaching materials for 35 courses for all the schools in agriculture and forestry in the nation. It was in charge of editing (pig farming), (sheep breeding), (veterinary medicine) (used by livestock farming special field), (pedology) (used by agriculture special field), and was assisting the editing of Material Mechanics and Pedology, etc.

Since its founding, the scientific research work has obtained very good results. It has received a total of 24 achievement awards in science and technology. Furthermore, it has contributed to the development of the agricultural industry in our country.



One of the views at Shanxi Agriculture University

The famous sheep breeding expert, Professor Lu Xiaowu, began to develop a breed of Shanxi fine wool sheep in 1956. He has already successfully raised a family of species. His work received a second class research award in the province of Shanxi. Associate Professor Tang Fangte led a study on the clams in China. Since 1973, for over seven years, he has basically finished his outdoor survey in the country. He has identified 12 species, over 120 kinds, and close to 400 types. He has discovered eight new families and 63 new kinds. He uncovered 19 new record families and 83 kinds in our country. His work was awarded the first class scientific research accomplishment in the province.

Under the leadership of Professor Wang Shou (deceased), with the joint effort of Associate Professor Lu Shilin, over 30 new soybean species have been selected and developed since 1958. Of these species, Jindou no. 1 and no. 2 were given an honorary award in the National Science Meeting in 1978. Associate Professor Duo Zhenhua began to breed wheat in 1952. He has developed over 10 species such as "Taigu 49", "Taigu 54", "Jinnong 17", "Jinnong no. 3", "Jinnong 27", Jinnong 135", etc. The pig farming expert, Professor Zhang Longzhi, led the study on the advantage of raising hybrid pigs. In recent years, he has obtained the combination of Neiben and Neibaben hybrid. There are eight centers in the country to breed and extend the new neibaben species.

The wheat leaf area correlation pattern and the verification design principle and its application led by Professor Li Huanzhang, the study of the breeding of Chinese dairy cows participated in by Associate Professors Ji Yilun and Du Lianshen and the new apple species Shanhong and Honguang raised by the faculty members of the Horticulture Department were all very successful.

For a long period of time, the school has paid a lot of attention to the principle of correlating theory to reality. In recent years, several teachers and a large number of students were sent to actively engage in the survey of natural resources and the division of agricultural duties in the province. They joined the relevant organizations to write the Agricultural Administrative Division in the Province (draft) and a survey report on the natural resources in agriculture, forest and livestock farming in the county of Taigu which was close to 300,000 words. In the teaching process, it places its emphasis on the education of fundamental theories and the guidance in production practice. It focuses on training the students to develop the ability to analyze and to solve the problems. Gradually, a hard working, moderate, carefully studying and theory and reality correlating atmosphere has been developed.

Since the founding of the school, the university has trained 7253 undergraduate students and eight graduate students. These students are scattered all over the country. Most of them, after they graduated, could very quickly familiarize their work and independently solve the problems encountered in production. Currently, many of them have already become the leading personnel and backbone in the scientific research in agriculture, forestry and livestock.

The entire school current has 68 laboratories and owns a number of pieces of advanced equipment.

The library presently has a collection of 410,000 books; among them are over 20,000 foreign books. There are 526 kinds of foreign periodicals and magazines.

Shanxi Agriculture University has its own experimental farm, including crop stations, livestock stations and gardening and forest stations. It is the base of teaching and research production as well as a base to develop and promote good breeds. The Agricultural Machinery Department has an an agricultural machinery factory. In addition, there are schools for dependents, a kindergarten and a school medical center.

Shanxi Agriculture University occupies 550 acres of land. The school building space is approximately 80,000 square meters.

Along with the normalization of the relation between China and the U.S. and the development of the friendship between the peoples in China and America, Shanxi Agriculture University established contact with Oberlin University in 1979.

> Current President: Zhang Longzhi Secretary of Party Committee: Feng Yi



THE INNER MONGOLIA AUTONOMOUS REGION

Inner Mongolia University

School address: College Road, Huuot, Inner Mongolia Autonomous Region

Inner Mongolia University was founded in 1957.

In order to execute the autonomous policy of the party in the nationality region, to prosper and develop the political, economical, cultural, scientific and educational affairs in the Inner Mongolia Autonomous Region, and to train people to perform socialist construction in the Inner Mongolia Autonomous Region who are experts as well as politically aware people, Inner Mongolia University was established in 1957 with the approval of the State Council.

The first president of Inner Mongolia University was occupied on a part time basis by Wu Lanfu who was the stand-by committee member of the Party Central Political Bureau, Vice Premier of the State Council, the First Secretary of the Party Committee in the Inner Mongolia Autonomous Region, and the Chairman of the People's Committee in the autonomous region. The famous botanist, committee member of the Chinese Academy of Sciences, originally Professor of Beijing University, Li Jitong, was the vice president.

Inner Mongolia University had six departments and eight special fields during its initial phase: Chinese Language and Literature Department which had special fields in Mongolian literature and Chinese literature, History Department which had a history special field, Mathematics Department which had a special field in mathematics, Physics Department which had a special field in physics, Chemistry Department which had a special field in physics, Chemistry Department which had a special field in chemistry, and Biology Department which had special fields in zoology and animal physiology, and botany and plant physiology.

In 1965, there were 1227 students in school. There were 674 faculty and staff members. Among them, there were over 300 full time teachers and scientific research personnel. Approxmimately 26% of them were Mongolians and other minority nationalities.

During the 10 year period of chaos, Inner Mongolian University was seriously damaged. It stopped recruiting for as long as five years. After the Gang of Four was crushed, the school was further developed through restoration and reorganization. In 1978, it added five additional departments and 11 special fields, as well as five research offices.

The entire school presently has 11 departments and 19 special fields. The undergraduate program is four years. Mongolian Literature Department

Mongolian Literature Special Field Chinese Literature Department

Chinese Literature Special Field

History Department

History Special Field

Philosophy Department

Philosophy Special Field

Mongolian Philosophy Special Field

Economics Department

28

Planning and Statistics Special Field

Foreign Language and Literature Department English Special Field Japanese Special Field Mathematics Department Mathematics Special Field Computational Mathematics Special Field Physics Department Physics Special Field Semiconductor Special Field Chemistry Department Chemistry Special Field Analytical Chemistry Special Field **Biology Department** Zoology and Animal Physiology Special Field Botany and Plant Physiology Special Field Plant Ecology Special Field Electronics Department Radio Special Field Electronic Computer Special Field

In 1980, there were 1600 undergraduate students in school. There were also 30 people in the science preparatory class for minority nationalities.

~~~~

In 1978, some of the subjects began to accept graduate students. The program was divided into three and two years. Currently, there are 45 graduate students in school.

The entire university currently has 1168 faculty and staff members; among them 512 are teachers. Mongolian and other minority teachers occupy approximately 39%. Among the teachers, there are nine professors, 40 associate professors, 266 lecturers, 114 teachers and 83 assistants.

Inner Mongolia University was established in a minority nationality region where the foundation in culture, education and science was relatively weak. During the process of its founding and development, it had obtained a lot of assistance from the colleges and universities in the nation. According to the instruction of Premier Chou,

12 higher education institutions, such as Beijing University, Nankai University, Fudan University and Nanjing University, sent over 130 selected teachers as well as a number of books and instruments to Inner Mongolian University. This action vividly demonstrated the friendship and unity between all the nationalities in the socialist family. When Professor Li Jitong went to work at the university, he had already reached 60 years of age. He not only brought all the research information he had collected all his life with him, but also took his graduate students and assistants with him. Professor Li Jitong had always insisted on the research direction of correlating theory with reality. Despite his age and health, he traveled for thousands of miles to Xilinguole Prairie to investigate the plant coverage. Later on, when he was very sick, he still insisted on working. He remembered the poem given to him as an encouragement by Premier Chou that "the body could always be buried in the green mountains, and why bother to return it to the homeland wrapped in horse leather". He fought all the way until he died of illness in 1961. The revolutionary spirit and the noble quality of devotion to the science and education affairs of Mr. Li Jitong has won the praises of many people. He was a fine example for the followers.

Inner Mongolia University has always been emphasizing running the fundamental courses well. It stresses the policy that experienced teachers should be on the front line of teaching. They should be in charge of the fundamental courses. Professor Chen Jie in the Mathematics Department has been teaching fundamental courses for over 20 years. In recent years, although he has become the vice president of the university, he still insists on doing the work of teaching fundamental courses as usual. While the teachers are doing a good job in teaching, in the meantime the university stresses that the teachers are encouraged to actively participate in scientific work. It promotes creative teaching on the basis of the research results so that teaching and research are complementing each other. Talents are to be developed in the practice of research as well as by teaching.

Inner Mongolia University current has a Mongolian Research Institute and seven research offices in Mongolian history, mathematical and theoretical physics, rare earth element chemistry, prairie ecology and electronics. They undertake the scientific research tasks of the Chinese Acadamy of Sciences and the autonomous region.

Inner Mongolia has already had over 20 academic leaders and a number of middle aged administrative backbones. The number of experts and scholars specializing in the Mongolian nationality and other minorities is also growing rapidly. The chief of the Mongolian Language Reserach Office, Professor Qing Ge Er Tai, studied in Japan in his early years. Since his return to our country, he has been studying the developmental history of the Mongolian language and its related languages. He has obtained excellent results. He is a well known Mongolian language expert in the nation. Professor Luo Liaofu in the Physics Department had resisted the pressure exerted by the Gang of Four. For several years, he has been working very hard in order to obtain substantial accomplishments in the area of fundamental particle theory. He has already become the academic leader in fundamental particle theory in the Physics Department.

In recent years, new developments have been made in the area of scientific research. In the aspects of natural sciences, the study of elementary particle theory and solid state excitation theory, the exploration of equations of turbulent motion, the development of the solid fuel additive--organic ferric compounds, the observation of natural resources and natural conditions in the Inner Mongolia region and its rational development and utilization, and the writing of the prairie portion in the book (Vegetation in China) have reached advanced levels in our country. In 1978, in the National Science Meeting, eight scientific research projects received research accomplishment awards. Professor Luo Liaofu was named as an advanced person. The solid fuel additive development group was rated as an advanced group. In 1980, 11 items, including the study on elementary particle theory and low nickel methane catalyst, received the technical accomplishment awards in Inner Mongolia Autonomous Region. In the area of social sciences, a number of publications and teaching materials, and several papers at a certain level have been written. Among these publications, the Mongolian Chinese Dictionary, edited by the Mongolian Study Office, the study on the Khitan language

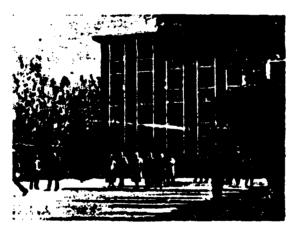
carried out together with the Nationality Institute of the Chinese Academy of Social Sciences, the correction of the History of the Chiang Nationality carried out by the Mongolian history study office, and other publications written in conjunction with other organizations, such as Revolutionary History of Inner Mongolia, Brief History of Northern Nationalities in Ancient China and Brief History of the Invasion of the Tsar of Russia in Mongolian Region, have received some attention and comment from the academic community.

er er af el a raine (el al

 $\langle \dot{\gamma} \rangle$ 

1.)

In order to strengthen academic exchange to improve the standards in teaching and scientific research, Inner Mongolia University has retained foreign and domestic experts to teach and to give lectures many times. Furthermore, good teachers, especially minority teachers, were selected to go to the U. S., Germany, Canada and Japan to study in higher education organizations and research institutions. Or, they were sent to visit and participate in academic meetings.



Faculty and students, togehter with foreign friends, standing in front of the lecture hall of the Department of Economics at Inner Mongolia University.

In 23 years since its inception, Inner Mongolia University has trained 4097 graduates from all nationalities for our country. Among them, 32% are of Mongolian and other minority nationalities.

The library of Inner Mongolia University currently has 520,000 volumes of books in Mongolian, Chinese, Tibetan and various foreign languages. It also has 200,000 volumes of periodicals.

The university runs a radio instrument plant and a chemical plant, which undertake the tasks in student practice and part of the

scientific research needs. Furthermore, these plants produce products such as comprehensive test meters for black and white televisions, excitation polarization meters and additives to solid fuels.

The university also has a printing plant which undertakes the duties of printing the school journals and part of the teaching materials. The school farm occupies over 100 acres of land.

Inner Mongolia University occupies 480 acres of land. Currently, it has 76,600 square meters of building area.

Current President: Yu Beichen Secretary of Party Committee: Ba Tu

/70



THE PROVINCE OF LIAONING

### LIAONING UNIVERSITY

School Address: Chongshan, Huangu District, Shengyang, Liaoning

Liaoning University was established on September 15, 1958 as a comprehensive university. It was built on the basis of Northeast Finance Institute, Shenyang Normal Institute and Shenyang Russian Special Training School.

Northeast Finance Institute was founded in 1952. Its predecessor was Northeast Planning and Statistics Institute and Northeast Finance Special Training School. When the institutions were reorganized in 1953, Northeast Business Special Training School, Northeast Banking Special Training School, Northeast Cooperative Special Training School and Northeast Accounting Special Training School were merged into the institute. At that time, there were five departments in industrial economics, agricultural economics, business economics, finance and credit and planning and statistics, as well as 15 special fields. The teaching team was relatively strong. There were over 200 professors, associate professors, and lecturers. It had trained a large number of special people in finance and economics.



One of the lecture halls at Liaoning University

1.1.1. N.

Shenyang Normal Institute, originally named as the Northeast Education Institute, was founded in 1951. In 1953, part of the teachers and students from some of the special fields in seven teaching special training schools in Heilongjiang, Songjiang, Jilin, Liaodong, Liaoxi, Shenyang and Dalian were transferred to Northeast Education Institute. A year later, it was changed to Shenyang Normal Institute. There were seven departments (disciplines) in Chinese, history, Russian, political education, mathematics, physics and arts. When Liaoning University was founded in 1958, most of the faculty members in the departments of political

education, arts and Russian were transferred away to form the new Shenyang Normal Institute. The remaining departments were merged into Liaoning University.

Shenyang Russian Special Training School was founded in 1951. There were over 200 teachers. In the earlier years, it had been specializing in training translators for the heavy industries. Later on, it also undertook the job of developing Russian teachers.

In the initial period after Liaoning university was founded, there were 10 departments and 22 special fields. In the areas of social sciences, there were the Chinese department, History department, Economics department, Finance and Credit department, and Planning and Statistics Department. In the areas of natural sciences, there were the Mathematics department, Physics department, Chemistry department, and Biology department. In addition, there was a Foreign Language department. There were over 840 teachers and over 5700 undergraduate students in the school.

In 1959, the two departments of Finance and Trust, and Planning and Statistics (with 4 special fields) were transferred away and formed the Liaoning Finance and Economics Institute in the City of Luda. Through the reorganization between 1960 to 1962, Liaoning University had 9 departments in Chinese, history, philosophy, economics, foreign language, mathematics, physics, chemistry, and biology. There were 12 special fields. At the same time, it also accepted foreign students as well as recruiting undergraduate students. The total number of teachers was 650.

a se a construir de la construi

During the 10 year period of chaos, Liaoning University was moved to a farm in Beizhen county in the province of Liaoning. It stopped recruiting for as long as six years.

After the Gang of Four was crushed, through restoration and reorganization, Liaoning University Gradually established a healthy teaching order. The quality of teaching has been improving on a continuous basis.

The university currently has nine departments and 21 special fields. The program is four years.

Chinese Language and Literature Department

Chinese Language and Literature Special Field History Department

History Special Field

a de la sector de la

Philosophy Department

Philosophy Special Field

Economics Department

Political Economics Special Field Industrial Economics Special Field International Economics Special Field Planning and Statistics Special Field

Foreign Language Department

English Special Field Japanese Special Field Russian Special Field

Mathematics Department

Mathematics Special Field

Computational Mathematics Special Field

Physics Department

Theoretical Physics Special Field Semiconductor Device Physics Special Field Radio Electronics Special Field

Optics Special Field

Chemistry Department

Organic Chemistry Special Field Inorganic Chemistry Special Field Analytical Chemistry Special Field

# Biology Department

**Biology (Environmental Protection) Special Field** Microorganism Special Field

In 1980, there were 3496 undergraduate students and 79 graduate students in school. In addition, there were foreign students from Australia, England, France, Germany, Japan, etc.

Currently, there are 1899 faculty and staff members; among them 832 are teachers. Among the teachers, there are nine professors, 54 associate professors, 538 lecturers, 20 teachers and 211 assistants. Furthermore, American and Japanese teachers are also retained.

The university has a part-time college which offers six special fields in Chinese, English, Japanese, philosophy, mathematics and physical education. In addition, it has a Correspondence Department which offers four special fields in Chinese, history, economics and library science. Furthermore, there are branch campuses offering four special fields in business management, planning statistics, English and Japanese. Currently, the part-time college has 1619 students. The Correspondence Department has 20,832 students.

The Literature, History and Economics Departments of Liaoning University were established at a relatively early stage. The teaching team in world economics, industrial economics, ancient literature, ancient Chinese history, world history and history of philosophy was very strong. Vice President Song Zexing went to study in England in his early years. He earned a Ph. D. in economics and became a member of the Royal Society. He has carried out studies on economic theory and foreign economic history. He has written books, such as Foreign Economic History, Brief Economic Histories of Major Capitalist Countries (the above books were written with Fan Kanghe), and Problems Associated with the Unbalanced Development in Capitalist Countries. Professor Zhou Chuanru had studied in England and Germany in his early years. He had obtained a masters degree from Cambridge University and a Ph. D. in literature from Berlin University. For many years, he has been studying the history of the relations between China and foreign countries. He has acquired a lot of experience. In the era from the 30's to the 50's, he had published articles such as Bone Inscriptions and Systems in the Shang Dynasty, Modern History of Italy, Geography of South America, Developmental History of Siberia, Diplomatic History between China and Russia.

In order to improve the quality of teaching, in recent years the university organized a number of teachers to study abroad according to its plan. Foreign experts and scholars were invited to lecture at the university. Furthermore, it has opened up academic exchange activities.

In the aspect of scientific research, Liaoning University has set up a research institute on Japan. In addition, it has 15 study offices specializing in Chinese literature, foreign literature, history of Liao Jin and Qing Dynasties, history of the development of the philosophy of Marxism, history of Chinese philosophy, world economics, economic problems in socialist China, scientific socialism, history of the Chinese Communist Party, Russian literature, semiconductors, optics, complexing and extraction, fermentation and ecology. There are 124 full time personnel. In recent years, it has edited 261 kinds of teaching materials on its own. It joined other schools to edit another 30 kinds of teaching materials. In these teaching materials, over 10 of them such as World Ancient History, Political Economics (northern edition), and World Economics, have already been published. In addition, the studies on the history of the Qing Dynasty, literature of the Ming and Qing Dynasties and world economics (with emphasis on the U. S., Russia and Japan) have also obtained preliminary results. Special articles will be gradually published in the future. In the aspect of natural sciences, the science departments have undertaken 63 research projects for the country as well as for relevant organizations on the city and province levels. It has also chosen over 100 topics on its own. Among them, nine projects have been given awards in national and local science meetings. The uncertainty equation in mathematics, the indicators of bonding parameters for acidity, alkalinity and softness in chemistry, and the extraction of scarce elements such as gallium, indium and thallium from smelting smoke have obtained certain progress and accomplishments.

In 1972, Liaoning University resumed accepting students. In 1978, it began to accept graduate students (three year program and two year program).

Since its founding in 1958, Liaoning University has trained 14,400 undergraduate students for our country. Furthermore, it has developed 178 foreign students for over 10 countries, such as the U. S., Australia, England, Canada, France, Germany Holland, Italy, Japan, Switzerland and Vietnam in five special fields, including Chinese and history.

The entire school currently has 44 laboratories for experimental teaching and scientific research purposes. In addition, it has a complete set of video cameras and recorders in color, and language laboratories.

The library in the university has a collection of over 900,000 books; among them there are 160,000 foreign books. There are 3000 periodicals. Among them there are over 1000 foreign ones. Of the Chinese books, some of them are rare collector's volumes.

The publications include: Journal of Liaoning University, Philosophy and Social Science Edition, Bimonthly, which is published in and out of the country, and Journal of Liaoning University, Natural Science Edition, which is published inside the country.

The university runs a machine shop, a print shop, a hospital and a kindergarten.

Liaoning University occupies 665 acres of land, in which the campus occupies 395 acres. The building space is over 140,000 square meters.

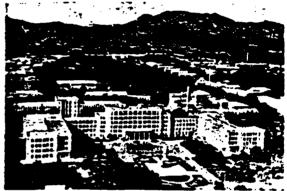
Current President: Jue Senhua Secretary of Party Committee: Chen Beichen (part time)

### DALIAN ENGINEERING INSTITUTE

School Address: Lingshui River, Dalian, Liaoning

Dalian Engineering Institute was founded on April 15, 1949. During the initial period of its founding, it had a School of Engineering, School of Medicine, Special School in Russian, Chemical Research Institute and Biological Product Institute. The engineering school was built on the foundations of Dalian Industrial Special Training School and the Radio Special Training School. It has eight departments in mathematics, physics, chemical engineering, mechanical engineering, civil engineering, radio, electrical engineering and metallurgy.

In 1950, Dalian University was abolished. The engineering school, medical school and Russian special training school became independent institutions. The engineering school was converted to Dalian Engineering Institute. It was placed under the leadership fo the Department of Industry of the Northeastern. Administration Committee. There were 1135 students in school. The number of faculty and staff was 443; among them there were 206 teachers.



17:

A bird's eye view of Dalian Engineering Institute

In 1951, the Radio Department was transferred to Zhangjiakou to set up the Radio Engineering Institute.

In 1952, all the departments in higher education institutions in the country were reorganized. The Mathematics Department of Dalian Engineering Institute was transferred to Northeast Normal University. The Physics Department was moved to Jilin University. The Metallurgy Department and Electrical Engineering Department were transferred to Northeast Engineering Institute. The Mechanical Engineering Department Automobile Special Field was moved to the Changchun Automobile and Tractor School. In the meantime, the Irrigation Department and Chemical Engineering Department of Harbin University and the Chemical Engineering Department, Irrigation Department and the Civil Engineering Department Roadwork Special Field were transferred into the institute. After the reorganization of schools and departments, Dalian Engineering Institute was under the jurisdiction of the Ministry of Heavy Industry in the central government.

In 1953, Dalian Engineering Institute was switched to be placed under the jurisdiction of the Ministry of Education of the Central Government. It had four departments in chemical engineering, mechanical engineering, irrigation and shipbuilding. Under these departments, there were 10 special fields in inorganic chemical engineering, organic synthesis engineering, fuel chemistry, chemical engineering machinery, construction of key water projects and hydroelectric stations, construction of waterways and harbors, metal shaving and its tooling, machinery manufacturing technology and equipment, design and construction of ships, ship machinery and mechanical engineering.

In 1954, the Shipbuilding Department was moved to Shanghai Jiaotong University. Three new special fields in intermediate and dye, synthetic rubber and casting technology were established. In 1957, three more new special fields in hoisting and transporting machinery, electrification and automation of industry and business and applied mechanics were set up.

In 1962, the policy of "adjust, reinforce, fulfill, improve" was thoroughly executed. After reorganization, there were six departments in chemical engineering, mechanical engineering, irrigation, shipbuilding, radio and mathematical mechanics, as well as 13 special fields.

In 1963, it was changed back to 23 special fields. They included: Irrigation Department with two special fields in irrigation engineering construction, and harbor and waterway construction; Chemical Engineering Department with six special fields in chemical engineering machinery, inorganic chemical engineering, fuel chemical engineering, macromolecular chemical engineering, intermediate and dye, and atomic energy chemistry; Mechanical Engineering Department with four special fields in machinery manufacturing and equipment and metallurgy and heat treatment; Shipbuilding Department with three special fields in internal combustion engines for ships, steam engines and turbines for ship use, and electrical work on ships; Radio Department with five special fields in automatic control, radio ranging and guidance, radar, computation techniques and radio technology; and Mathematical Mechanics Department with three special fields in engineering mathematics, applied mathematics and applied physics.

In 1964, the special fields in computation techniques and radar were terminated. The special fields in applied mathematics and applied physics stopped accepting new students. There were 21 special fields remaining in the university. In the latter half of 1965, the crane special field was transferred away and the turbine engine special field temporarily stopped accepting new students. At that time, the university had 5200 undergraduate students, 34 graduate students and 2669 faculty and staff members. There were 1007 teachers among them.

In the 10 year period of chaos, Dalian Engineering Institute was seriously damaged. It was forced to stop accepting students for as long as four years. Furthermore, it was downgraded to be subject to the control of the province of Liaoning. In 1970, recruitment was resumed. It accepted 121 students in an experimental class. The program was for two years. In 1971, it accepted 120 students and the program was three years.

After the Gang of Four was crushed, Dalian Engineering Institute carried out restoration and reorganization work. The normal teaching order was established. The quality in teaching has been gradually improving. In 1977, the recruiting system was revised. The program was changed back to four years.

In 1978, it was placed under the jurisdiction of the Ministry of Education in the Central Government. In addition, it began to accept graduate students. In 1979, the Mathematics Department and Physics Department were restored. In 1980, the Department of Management Engineering was added.

Dalian Engineering Institute currently has 11 departments, two divisions, 25 special fields, three scientific research institutes and eight research offices.

Mathematics Department Applied Mathematics Special Field Physics Department Applied Physics Special Field Engineering Mechanics Department Engineering Mechanics Special Field Chemical Engineering Department Inorganic Chemical Engineering Special Field Coal Related Chemical Engineering Special Field Basic Organic Chemical Engineering Special Field Dye and Intermediate Chemical Engineering Special Field Macromolecular Chemical Engineering Special Field Chemical Engineering Machinery Department Chemical Engineering Machinery Special Field Mechanical Engineering Department Machinery Manufacturing Technology and Equipment and its Automation Special Field Hoisting and Transporting Machinery Special Field Metallic Materials Special Field Irrigation Engineering Department Irrigation and Hydroelectric Construction Engineering Special Field Harbor Engineering Construction Special Field Offshore Petroleum Engineering Construction Special Field Shipbuilding Engineering Department Ship Design and Construction Special Field Ship Internal Combustion Engine Special Field Turbine Engine Special Field Electronic Engineering Department Radio Technology Special Field Industrial Automation Special Field Chemical Engineering Automation and Instrumentation Special Field Computer Science and Engineering Department Computer Engineering Special Field Comptuer Software Special Field Management Engineering Special Field Management Engineering Special Field

In addition, there are the fundamental course teaching division and the political theory course teaching division.

In 1980, there were 5539 undergraduate students, 154 special students, 30 preparatory class students and 194 graduate students in school. The undergraduate program is four years. The special training program is two years. The preparatory class is for one year. The graduate program is either two or four years. The affiliated evening school had 277 college students.

The institute was entrusted by the country to establish the Chinese Industrial and Technical Management Center in Dalian which was founded as the result of a collaborative effort by the Chinese and Americans. The first training class held this year had 120 students.

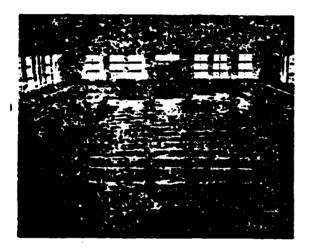
The entire institute currently has 3660 faculty and staff members; among them 1525 are full time teachers. Of the full time teachers, there are 29 professors, 188 associate professors, 967 lecturers, 18 teachers and 323 assistants.

Dalian Engineering Institute presently has three research institutes specializing in engineering mechanics, ocean engineering and irrigation and hydroelectric power. In addition, there are eight research offices in charge of applied mathematics, chemical engineering, coal and dye chemical engineering, precision machinery and technology, metallic materials, thermodynamics and system engineering. The toal number of full time scientific research personnel is 335.

In 1980, there were nearly 30 foreign experts giving lectures at the institute. Furthermore, four foreign experts have been hired to teach at the institute on a long term basis.

The major accomplishments made in scientific research by Dalian Engineering Institute include: the completion of the design and experimental study of three important harbors, such as the New Harbor in Dalian, the completion of the development of the first large digital control planer-type milling machine, and the study of using electronic computers to solve various problems. Especially in the study of structural mechanics, the large scale structural analysis program is not only in a leading position in the country, but also has reached international levels. In 1965, the 631 blue dye received

an accomplishment award from the National Science Committee. In 1973, another active dispersion dy was developed, which is suited for dying polyamide fiber and silk. It has already been proven to be effective. In addition, three natural science research projects on the strength and stability of a pressure resistant diving conical shell, the switching of elements in finite analysis, and group theory and generalized symmetry in structural analysis are in a leading position both in and out of the country.



The Harbor Pond in the irrigation Engineering Department at Dalian Engineering Institute The experts and professors of the institute who have contributed to teaching and research include: Qian Lingxi, who is a member of the Ministry of the Chinese Academy of Sciences, a model of the workers in the nation, the Vice President of Dalian Engineering Institute, and the Chief of the Engineering Mechanics Institute; Wan Xie who has made important contributions in the areas of computer application and compilation of complicated programs; Tang Liming who is an expert in elastic mechanics

and finite element theory; Hou Yufen who has worked in synthetic fibers and dye chemistry for many years and obtained excellent results; Nie Hengrui who specializes in coal chemistry and has been working on the fast thermal decomposition of coal; Zhao Guofan who has been con-ducting experiments in the area of steel reinforced concrete and its strength; Yuan Wanzhong who is a famous scholar in inorganic chemistry; and Wan Xiaoshu who is a famous expert in the area of materials science.

Since its inception, the institute has trained 21,999 undergraduate students and 159 graduate students.

The entire institute has 54 laboratories. It also has a relatively large harbor pond and a ship pool to serve as the experimental base for ocean engineering, harbor engineering and ship construction. The institute has set up three computer centers. It is one of the earliest organizations in the country to study the use of computers to solve various problems.

The institute is paying a lot of attention to the build-up of modern teaching means. Some of the courses are using projectors, video recorders, movies, etc.

The school operates a machine shop, an instrument plant, a chemical machinery plant and an electronic shop. They are serving the needs in of D teaching, research and laboratory construction. They are the base of teaching and practice for the faculty and students.



/73

The faculty and students of Dalian Engineering Institute doing experiments on waterwork structures

The institute publishes Journal of Dalian Engineering Institute

and Teaching and Research at Dalian Engineering Institute.

The library has collected 920,000 books; among them there are 640,000 Chinese books and 280,000 foreign books. There are a total of 130,000 volumes of periodicals; among them 100,000 volumes are foreign.

The institute has its own affiliated evening college, middle school, elementary school, kindergarten, medical center and printing plant.

The institute is situated in two locations. It occupies a total of 1920 acres of land. The building space area is over 260,000 square meters.

School Anniversary date: April 15 Honorary President: Qu Bochuan Current President: Qian Lingxi Secretary of Party Committee: Zhou Ming

### SHENYANG POLITECH INSTITUTE

14.14.1.14

### School address: Wenhua Road, Shenhe District, Shenyang, Liaoning

The predecessor of Shenyang Polytech Institute was the Third Northeast Polytech School which was founded in 1953. Later on, it was changed to Shenyang Second Polytech School. In 1955, it was again changed to Shenyang Machinery Manufacturing School. At that time, it was a key medium level school.

In 1960, Shenyang Machinery Manufacturing School and Shenyang First Chemical Engineering School were merged to become the Shenyang Polytech Institute. Dong Biwu personally wrote the name for the institute.

In the initial period after it was founded, the institute had three departments:

Radio Department, which had special fields in radio component manufacturing, radio measurement instrument manufacturing and gyroscope manufacturing.

Mechanical Engineering Department, which had special fields in machinery and equipment manufacturing and production of special steels.

Chemical Engineering Department, which had special fields in corrosion and surface protection, production of scarce elements, organic synthesis and chemical analysis.

There were 3326 students in school. Among them, there were 200 in the college class and 3126 in middle special classes. The total number of faculty and staff was 1351.

In 1962, according to the policy of "adjust, reinforce, fulfill, improve," the college portion was merged into Tianyuan Mechanical Institute. The rest of the school continued operating a medium level special school. In 1963, it was changed to Shenyang First Mechanical Engineering Institute.

In April 1965, the institute was changed into a work-study higher learning technical school. The name was changed back to Shenyang Polytech Institute.

In the 10 year period of chaos, the institute was seriously damaged. In June 1969, it was changed to the National Songjin Machinery Plant.

/74

In January 1972, the school was reopened. The name was determined to be Shenyang Machinery Polytech School. It offered five special fields in machinery manufacturing, detonator manufacturing, controllable silicon, pressure processing and digital control. At one time and another, the school had accepted 832 students in a three year program.

In January 1979, according to the need of economic construction, Shenyang Polytech Institute was restored with the approval by the State Council.

Since it began accepting students in 1954, the institute has trained 207 college graduates and 4093 middle special training school graduates for our country in over 20 years.

At the same time as the institute is completing its teaching duties, it is also actively involved in research activities. Some of the projects have received awards in the National Science Meeting. Some of them were praised in the Provincial Science Meeting.

Although there were ups and downs in the development of Shenyang Engineering Institute, yet it has already established the school tradition of emphasizing the teaching of fundamental theories and strict requirements over the years. It has developed its own characteristics in the areas of technical technology and production automation. It has a number of famous experts and professors, as well as some high level teachers.

It currently has four departments and eight special fields. Mechanical Engineering Department

Machinery Manufacturing Technology Special Field Equipment and Automation Special Field

Special Casting Technology and Equipment Special Field Special Mechanical Engineering Department

Special Engineering Design and Manufacturing Special Field Detonator Design and Manufacturing Special Field

Electronic Engineering Department

いたのである。ころうたんため

Industrial Production Automation Special Field Electronic Computer Application Special Field Business Management Department

Business Management Special Field

The program for each special field is four years. The Department of Business Management has an affiliated advanced study class for cadres. The program is two years.

The institute has a research institute in special equipment design. Currently, it has 30 full time research personnel.

In 1980, there were 762 undergraduate students in school. In addition, there were 96 students in the advanced study class for cadres.

The school presently has 976 faculty and staff members, out of which there are 222 teachers. Among the teachers, there is one professor, two associate professors and one high level engineer, 85 lecturers, seven engineers, three technicians, 83 teachers and 40 assistants.

It presently has 16 laboratories and exhibition rooms. It owns electronic computers, high frequency electrical furnaces and over 2000 pieces of other equipment. They basically satisfy the needs in teaching and research. In addition, there are electrified classrooms equipped with closed circuit television and video recorders for teaching use.

It edits and publishes Scientific Technology at Shenyang Engineering Institute on an irregular basis.

The library has collected over 140 volumes of books, out of which over 10,000 are Chinese and foreign books. There are 400 periodicals; among them 94 are foreign.

The affiliated plant operated by the school has 390 pieces of machinery and power equipment. In addition to providing the opportunity for practice for faculty and students, it also undertakes some production duties.

Shanyang Engineering Institute occupies 189 acres of land. The building space is 56,000 square meters.

### NORTHEAST ENGINEERING INSTITUTE

School address: Wenhua Road, Heping District, Shenyang, Liaoning

Northeast Engineering Institute was founded on the basis of the Engineering School of the original Northeast University.

In 1923, Northeast University was established by Zhang Zuolin in Shenyang. At that time, this highest learning institution had four schools in literature, law, science and engineering. In 1928, after Zhang Xueliang became president, the university had retained a number of famous scholars in the country, such as the famous architect Liang Sicheng and the mechanical expert Liu Xianzhou, to teach, and paid them very well. The teaching team was very strong. The library and equipment were fairly complete. It had a fairly good reputation in the country. The institute had developed a number of specially trained people for our nation. The current vice president of Northeast Engineering Institute, Professor Liu Zhixin, Professor Zhou Qingfan in the Department of Mathematics, and Professor Guan Shaozong in the Department of Mining were early graduates from the old Northeast University.

After the September 18th Incident in 1931, Northeast University was moved into interior China. It was scattered in Peiping, Xian and Santai in Sichuan.

After the July 7th Incident in 1937, Northeast University School of Engineering was relocated to Xi An. It was merged together with Peiping University School of Engineering, Beiyang Engineering Institute and Jiaozuo Engineering Institute to form the Northwest Engineeering Institute in the county of Chengguo.

In 1946, after winning the anti-Japanese War, Northeast University was moved back to Shenyang. Soon afterwards, it was moved to Peiping.

In March 1949, over 40 faculty members and 200 students of Northeast University School of Engineering returned from Peiping to Shenyang. In April of the same year, Shenyang Engineering Institute was founded on the basis of Northeast University School of Engineering.

220

/75

The entire view of Northeast Engineering Institute

In September 1950, on the basis of Shenyang Engineering Institute, Anshan Polytech Special Training School, Fushun Coal Mining School, Jilin Military Industrial School and Andong Academy of Science were merged into it. The school became Northeast Engineering Institute. The Administration Department was located in the Tiexi District in Shenyang. In the meantime, there were branch campuses in Anshan and Fushun. The president was Jin Shuliang who was a famous metallurgist in our country, as well as a member of the committee on the Chinese Academy of Sciences. On September 10, school officially began. In the same winter, the two branches in Anshan and Fushun were abolished. First year students were moved to Changchun. The Changchun branch was thus established. In the fall of 1951, the entire faculty and students were again concentrated in Shenyang. In 1952, Northeast Engineering Institute was moved to the beautiful shore by the Nan Lake in Shenyang.

During the early period after its founding in 1950, it was already a multi-disciplinary college in sciences and technology with a rich background. At that time, based on the principle that "to run a good university required outstanding professors" and "to widely retain the scholars in the world in order to obtain their specialties", the school managed to attract a number of experts and professors from all over the country to come to teach in addition to keeping over 30 graduates from the original Northeast University Engineering School. For example, the current vice president, as well as Professor Ma Longxiang and Professor Cheng Xinte, the chairman of the department of Mechanical Engineering, were retained at that time. Back then, there were seven engineering departments in chemical engineering, mining,

metallurgy, mechanical engineering, electrical engineering, civil engineering and architecture, as well as three scientific departments in mathematics, physics and geology. There were 2721 students in school. The entire institute had 987 faculty and staff members; among them 332 were teachers.

In 1952, during the reorganization of all the schools and departments in the nation, the Electrical Engineering Department of Dalian University, the Mining Department of Harbin Polytech University and the Mining Department of Shandong University were merged into Northeast Engineering Institute. The Chemical Engineering Department of Northeast Engineering Institute was, in the meantime, transferred into Dalian Engineering Institute. Its Geology Department was merged into Changchun Geology Institute. The Physics Department and Mathematics Department were merged into Northeast People's University.

In 1953, the special field of metallurgical industry economics was added. In 1955, the program was changed from four to five years. In 1956, the Architecture Department was moved to Xi An and formed Xi An Institute of Metallurgy and Architecture.

In 1958, the school added science disciplines. It set up departments of engineering physics and sciences. With the Department of Sciences, there were two special fields in metal physics and metal physical chemistry. The program was five and a half years. The engineering disciplines had six departments in iron and steel smelting, metallurgy of colored metals, mechanical engineering, electrical power, mining electricity and mining engineering.

Up until this point, the institute had a total of eight departments and 26 special fields. The number of students in school had reached 6868. There were 2096 faculty and staff members; a mong them 768 were teachers.

In 1960, the entire institute had eight departments and 39 special fields. The number of students in school had reached 8252. The total number of total faculty and staff members reached 3697. Among them, the number of teachers had increased to 1495. The scale of the school thus reached the highest level in the history of the school.

In 1961, after the policy of "adjust, reinforce, fulfill, improve" was executed, up until early 1966 it had seven departments in mining, iron and steel smelting, metal processing, mechanical engineering, automatic control and sciences, as well as 30 special fields. The number of students in school had been reduced to 5704. The number of faculty and staff members was 2808; among them there were 1237 teachers.

In 1952, the institute began to accept graduate students. Until 1959, it had accepted 190 graduate students.

During the 10 year period of chaos (in 1966), the school was severely damaged. It stopped recruiting for as long as six years.

Recruiting was resumed in 1972. Until 1976, it had accepted five classes of three year program students.

The institute began to join the national entrance examination in 1977. The program was changed to four years.

In 1978, it resumed accepting two year and four year graduate students. Currently, the entire institute has 10 departments and divisions, 21 special fields, four teacher training classes and three special study classes.

Mathematics Department

Mathematics Teacher Training Class Physics Department

Metal Physics Special Field

Physics Teacher Training Class

Mining Department

Mining Engineering Special Field Mining Well Construction Special Field

Mine Selection Special Field

Iron and Steel Smelting Department

Iron and Steel Smelting Special Field

Thermal Treatment in Metallurgy and Thermal Energy Utilization Special Field

Colored Metal Metallurgy Department

Colored Metal Metallurgy Special Field Metallurgical Physical Chemistry Special Field Semiconductor Material Special Field Metallic Material Special Field

Metallic Material Pressure Processing Special Field Metallic Material Special Field Casting Special Field

Mechanical Engineering Department

Machinery Manufacturing Technology and Equipment Special Field Mechanical Engineering Special Field

Vacuum Technology Special Field

Fluid Transmission and Control Special Field

Automatic Control Department

Industrial Automation Special Field

Electronic Computer Science and Engineering Special Field Radio Technology Special Field

Metallurgical Automation Instrumentation Special Field

Management Engineering Department

Management Engineering Special Field

Management Engineering Cadre Training Class

Fundamental Courses Division

Mechanics Teacher Training Class Chemistry Teacher Training Class Technical English Special Field Technical Japanese Special Field

In 1980, there were 5525 students in school. In addition, there were 174 graduate students.

The total number of faculty and staff members in school is 3472; among them there are 1472 teachers. Among the teachers, there are 24 professors, 249 associate professors, 859 lecturers and 340 assistants.

In addition, its branch still has 425 commuting undergraduate students, 134 special commuting students in a two year program, 900 evening college students and corresponding students and 2687 short term students in various classes.

Northeast Engineering Institute has already become a relatively large scale technical college with a good foundation.

Since 1977, Northeast Engineering Institute has participated in the editing of a total of 94 kinds of national teaching material, out of which it was in charge of 55 kinds and participating in 39 other kinds. 31 of such teaching materials were already published. In addition, there are 29 translated teaching materials. Since 1978, the institute has edited and published 334 kinds of teaching materials for its own use.

The school has always been actively encouraging teachers to participate in scientific research work. The entire institute has five research institutes, and 18 laboratories for research; i.e., research institutes in mining engineering, metallurgy, material science, mechanical engineering and automation. In science, there are three research laboratories in applied mathematics, fracture physics and geology. In engineering, there are 14 research laboratories in mechanical strength, hydraulic machinery, power milling, automation, pressure processing of metals, super plasticity, amorphous materials, rock crushing, ventilation safety, coal and steel, smelting of light metals, thermal energy and its utilization, mine selection and underground engineering structures. In addition, there is a natural dielectrics research laboratory.

According to the incomplete statistics between 1954 to 1980, the school had completed over 1500 projects for over 10 organizations from ministries and committees on the national level to the provincial level in Liaoning. Among them, 23 projects such as the "study of the smelting of vanadium-titanium magnetite in a blast furnace" reached advanced levels in the world. 376 subjects reached advanced levels in our country.

In the National Science Meeting held in March 1978, Northeast Engineering Institute received 28 scientific research awards. The coal and steel teaching and research office was rated as an advanced collective body. The famous control theory expert, Professor Zhang Siyin, was praised as an advanced worker. The coal and steel teaching and research at Northeast Engineering Institute was a relatively old one. Before 1965, under the leadership of the old president Professor Jin Suliang, who was a famous metallurgist in our country, the technical direction was correct and the old, middle age and young teachers were united to carry out scientific work in vanadium-titanium magnetite for

long periods of time. They improved the measure to blow the oxides at the interface in Si, Ti-containing steel. Together with other organizations, the office was able to realize the smelting of vanadiumtitanium magnetite containing 30% TiO, in a blast furnace. They solved the problem which had never been solved before. This was the first example of blast furnace smelting of high titanium content minerals. This item had received a first class award from the scientific committee of the government. Professor Zhang Siyin, as early as in the 50's when he was studying in Russia, had written six papers in the stability of motion and optimum in control. They were published in the journals in mathematics, mechanics, automation and motion published by the Russian Academy of Sciences. They were rated to be "located at the world level in motion stability theory". After returning to our country, he continued to study modern control theory. He had published eight papers in the Journal of Mechanics and Journal of Automation, which were published by the Chinese Academy of Sciences. They all reached international standards. The textbook used by the graduate students in the course of Optimal Control at Massachusetts Institute of Technology quoted his papers.

Since 1955, the institute has held six scientific symposia. 567 papers were presented. Furthermore, in 1955, the institute began to publish the technical publication, Journal of Northeast Engineering Institute, which is available in and out of the country. In addition, the institute also publishes on an irregular basis the following publications: Metallurgy Digest (volume for iron and steel), Mining Research, New Technology in Mining Machinery, Status on the Automation in Metallurgy in Liaoning and Colored Metal Metallurgical Information. They introduce the scientific research results in the school and serve to promote the development of scientific research work.

/77

Northeast Engineering Institute insists on the principle of improving the standards in teaching and research by practice. It effectively combines getting results together with training people. The institute has selected 27 excellent teachers who are strong in fundamental theories, foreign language abilities and special fields as the academic leaders. They formed various academic groups. Presently, significant results have already been obtained. The

Metallograph Teaching and Research Office in the Department of Metallic Materials is an academic group led by Associate Professor Liang Zhite. For many years, it has been undertaking the duties of teaching and research. They not only accomplished the teaching work well but also obtained encouraging results in the study of the directional distribution function in structural organization. The paper on The Numerical Method to Calculate the Expanded Yakby Polynomial in ORD Calculation by Iteration written by them was published in the International Organization Journal (Fixture). This was the first time ever that this journal published any paper written by a Chinese. They were also invited to the 4th X-ray Diffraction Analysis Conference held by the Ministry of Metallurgy as well as the organization technical exchange meeting held by the metal society, the chemical society and the silicate society. The papers they presented were praised by the experts. The school is actively involved in creating conditions to send teachers abroad. In the recent two years, 23 teachers have been sent to countries such as Japan, the United States, Germany, France, Sweden, Canada, Belgium, England and Romania. In order to improve the friendship and interaction between the institute and foreign scholars, Northeast Engineering Institute has sent teachers to attend international academic meetings and to participate in various technical touring groups. The institute has already established school-to-school academic exchange relationships with the Japanese Northeast University. The chair of the Physics Department, Professor Lai Zouhan, has his own understanding with regard to the theory of titanium fracture. In May 1980, he was recommended to attend the 4th International Titanium Alloy Conference in Tokyo. He also presented a paper in the meeting. He was also invited to give special topic reports in the graduate schools in the United States. His work has been seriously looked upon by foreign scholars. In recent years, the activity of inviting famous scholars both in and out of our country to lecture at the school has become more frequent. It was held 33 times in two years. 212 American, British and Japanese experts and scholars arrived at the school to give lectures. These activities have a promotional effect on the improvement of the academic standard of the school.

The library currently has over 900,000 books and 100 volumes of periodicals. The total volumes in the collection number over one million.

The institute currently has 53 laboratories and one electronic computer center and one electronics lecture hall. In addition, it also operates a machine shop and an electronic instrument plant. It owns a number of computers of various models, optical grating spectrograph, scanning electron microscope, tri-axial press, etc., to provide outstanding conditions for teachers and students to perform teaching and research.

Northeast Engineering Institute occupies 1566 acres of land. The school is centered around a seven-story main building. It is surrounded by four large lecture halls in mining, architecture, mechanical and electrical engineering and metallurgy. It has a gymnasium, various laboratories, affliated plants and fringe benefit installations. The present building space is over 280 square meters. The campus is full of trees and the scene is very beautiful. It provides a nice environment for the teachers and students to read.

In the 30 years since its founding, Northeast Engineering Institute has trained 28,000 undergraduate students and 200 graduate students. In addition, 1460 undergraduate students have completed their work from the correspondence school. Furthermore, it has developed nearly 100 undergraduate special and graduate students for eight countries.

The students developed by the institute are known to be very practical and their style is realistic. They utilize their knowledge in their posts to contribute to the construction of our socialist country. The vice president of the Beijing Metallurgical Institute of the Ministry of Metallurgy, associate chief engineer Lu Yunxin, successfully developed the "new technology of simple low temperature alkaline flotation of lithium containing minerals" and was given the inventor's award issued by the National Scientific Committee in 1965. The engineer of the institute, Chen Dingjiu, successfully developed a "magnetic metal detector". He was given an inventor's award by the National Scientific Committee in 1964. The chief engineer of

the institute, Song Xiaotian, successfully demonstrated the "compressing explosion segment method" in Zhongtiao Mountain and the result was listed as one of the most significant accomplishments by the Ministry of Metallurgy and the National Scientific Committee in 1966. They were graduates of Northeast Engineering Institute in the 50's.

 $\sim 10^{10}$ 

5

3

64-33-44-41

**?** 

Current President: Kang Minzhuang

### FUXIN MINING INSTITUTE

## School Address: Outside East Gate, City of Fuxin, Province of Liaoning

Fuxin Mining Institute was founded in August of 1958 on the basis of Fuxin Coal Mining School. It was to be developed into a higher learning institution in coal industries. During the beginning stage since its inception, there were 3 departments in coal mining, mine construction, and machinery and electricity. Under them, there were 6 special fields in underground mining, open mining, mine construction, mine survey, mine machinery and electricity, and manufacturing of mining machine. The name of the school was Fuxin Coal Mining School. /78

/79

In September of 1961, Fushun Coal Mining Institute and Liaoning Coal Mining Teacher Training Institute were merged into the school. After the merge, there were 571 faculty and staff members. Among them, 286 were teachers. There were 2,054 students in school. In addition to the original engineering departments and special fields, it added a teacher training division which had 3 departments in Chinese, Mathematics, and Physics and Chemistry. Until September of 1964, the entire students in the teacher training division graduated. The division of teacher training was then abolished.

In September of 1964, Jixi Coal Mining Institute was merged into the school.

Before the merge, Fuxin Coal Mining Institute, Fushun Coal Mining Institute, Liaoning Coal Mining Teacher Training School, and Jixi Coal Mining Institute were coal related institutions developed on the foundation of middle level special training schools in 1958. They had some operating experience in running schools.

From 1961 to 1964, through adjustment of all the schools merged in, Fuxin Coal Mining Institute concentrated its manpower and equipment, reorganized its teaching order, adjusted its teaching plans, intensified its control over teaching, and improved the teaching standard of its teachers. The institute was enriched and the quality of teaching was gradually improved. In addition, the Party Committee was very serious about the student

political ideology work. Starting from the characteristics of the coal industry, education was carried out among the students to serve the coal industry and to work hard for the coal industry of our country. The students worked very hard in special training education. They marched upward and established the clear attitude of changing the backward coal mine status in our country. Through reorganization, a modern coal university was advancing with stability.

During the ten year period of chaos, the normal order at Fuxin Coal Mining Institute was disturbed. The school was seriously damaged. It was forced to stop recruiting for 6 years.

In 1978, Fuxin Coal Mining Institute was under the dual leadership of the Ministry of Coal Industry and the province of Liaoning. The Ministry of Coal Industry was primarily in charge. In June of the same year, it was changed to Fuxin Mining Institute.

Fuxin Mining Institute currently has 4 departments, 10 special fields, and 2 teacher training classes. The programs are all four years.

Mining Engineering Department

Sector Sec.

Underground Coal Mining Special Field Coal Mine Well Construction Special Field Open Coal Mining Special Field Geological Survey Department Coal Field Geology and Survey Special Field Coal Mine Survey Special Field Machine and Electricity Department Coal Mine Mechanization Special Field Coal Mine Electrification and Automation Special Field Engineering Mechanics Special Field Mechanics Teacher Training Class Special Field Mechanical Manufacturing Engineering Department Coal Mine Machinery Manufacturing and Repair Special Field Metallic Materials and Thermal Treatment Special Field Drafting Teacher Training Class Special Field Since 1979, it began to accept graduate students. The program is two years.

In 1980, there were 1,969 undergraduate students, 4 graduate students, and 912 correspondence students in school. There were 1,038 faculty and staff members. Among them, there were 33 associate professors, 205 lecturers, 139 teachers, 16 engineers, and 4 assistant researchers.

In October of 1978, the institute set up graduate programs. It had 4 research laboratories in rock mechanics, fundamental theories of mining, mine electrification, and mine mechanization. The scientific research work has already produced significant results. In 1978, the ((Mechanized Well Drilling Rig)) (umbrella shaped) which was developed in collaboration with other units and the ((800 Ton Hydraulic Support Test Platform)) received awards in the National Scientific Conference. In 1977, the ((Study on the Stabilization and Skid Resistance of the Slopes of an Open Mine)), the ((20 Ton Slow Moving Hoist)), and the ((MLJ-1 Coal Lane Digger)) received awards of scientific research in the provincial level. Some of the research and development projects, such as the ((Model MP Rigidity Test Device)) and the ((Hydraulic Propagating Well Drilling Wheel)) have already passed technical evaluation by our country. They were received very well. Through practice in teaching and scientific research, in recent years, the teachers have written nearly 200 papers on basic theories, scientific research results, and teaching research.

Since 1979, it began to edit and publish the ((Journal of Fuxin Mining Institute)).

The entire institute has 13 laboratories for fundamental and special field courses. They correspond to 46 courses and are able to run 250 experiments. These laboratories own many pieces of instruments and equipment, such as a transmission optical apparatus, automatic reflective optical apparatus, vibration test platform, holograph, high temperature metallographic microscope, universal precision milling machine, precision coordinate lathe, gear testing apparatus, infra red ranging meter, and gyroscopic theodolite, for use in teaching practice and scientific research. The newly built electronic computer station and the closed circuit color television system also provided means for modernization.

In recent years, Fuxin Mining Institute has intensified relations with other institutions in the country. It invited experts and professors to visit the institute to give lectures and to participate in various scientific discussions and seminars. The teaching standard and research capability have been greatly improved. Since 1979, it has selected 7 outstanding teachers to study and observe in Germany, the United States, and England. In addition, it has established school to school contacts with universities in Germany. It signed ((Agreements in Teaching and Scientific Research Cooperation)) and began visiting and lecturing activities. In addition, it has invited American and Canadian scholars to teach at the institute. Through these activities, the interaction between the institute and foreign schools, as well as the teaching and research of the institute, was greatly promoted.

Since its inception 22 years ago, Fuxin Mining Institute has trained 6,196 high level coal technical personnel for the country. Most of them are working in the mines in the coal industry responsible for technical management, scientific research, and production command. They are contributing toward the development of coal.

The library has collected 310 thousand volumes, among them there are 30 thousand foreign books. There are 866 periodicals. Among them there are 245 foreign periodicals.

The school operates a practice factory, responsible for the duties of student practice, and mechanical processing and manufacturing of teaching instruments and developmental products. It has an affiliated print shop, responsible for the printing of teaching materials and lecture notes for the entire institute. It also undertakes part of the teaching materials editing task for higher learning institutions.

One of the student dormitories at Fuxin Mining Institute.



The institute has a correspondence division. There are 12 correspondence stations in the main mining areas in Liaoning, Jilin, and Heilongjiang. They are responsible for the employee correspondence college education for the coal mines. In addition, there are a medical center, a nursery, and a kindergarten.

The entire institute occupies 649 acres of land. The school building space is over 80 thousand square meters. In addition, a teaching laboratory and science hall with over 20 thousand square meters of space is under construction.

### DALIAN OCEAN SHIPPING INSTITUTE

# School Address: Lingshui Bridge, Southwest Outskirt, City of Dalian, Province of Liaoning

Dalian Ocean Shipping Institute was founded in 1953 by merging Shanghai Navigation Institute, Northeast Navigation Institute, and Fujian Navigation Special School. It was the first comprehensive ocean shipping institute established after our liberation which primarily concentrated on sea transportation.

The predecessor of the original Shanghai Navigation Institute was the navigation class in Shanghai Nanyang Public School. Shanghai Nanyang Public School was founded in 1908. Later on, it was changed to Advanced Practical School. It had 3 special classes in road and electricity, civil engineering, and navigation. In 1912, the navigation class was left out to become an independent school. It was named the Advanced Commercial Ship School. In 1915, it was terminated due to lack of funding. It was reinstated in 1929. It had a piloting class. In 1930, it added an engineer class. Furthermore, a practice workshop was established. In the anti-Japanese war in 1937, the school building, books, and equipment were destroyed by gun fire. Therefore, it was forced to cease operation. In 1939, it was restored in Chongqing. Its name was changed to Chongqing Commercial Ship Special School. In addition to navigation (pilot) and engineer classes, a ship building class was added. In 1943, the students in all 3 classes were merged into Jiaotong University. In 1946, it was moved back to Shanghai to rebuild the school. The name was Wusong

/81

Commercial Ship Special Training Class, with 2 classes in navigation and engineering. In the fall of 1948, it added a radio operator training class. In September of 1950, the navigation control department of Jiaotong University was merged into it. The name was changed to Shanghai Navigation Institute. It had 3 departments in navigation, engineering, and harbor engineering, and a telecomunication class.

ݥݛݞݷݛݷݚݘݚݞݵݡݵݠݫݵݠݫݞݵݙݠݵݚݥݾݸݾݸݾݸݷݞݛݞݛݑ

The predecessor of Northeast Navigation Institute was Northeast Commercial Ship School, which was founded in March of 1927. The school was located in Harbin. It had 2 classes of piloting and engineering. It ceased to operate after the "September 18th" incident in 1931. In 1937, it was restored by the puppet Manchu Regime to become a crew training center. In 1942, it was changed to a high level crew training center. In September of 1944, it was relocated to Hulu Island. After winning the anti-Japanese war, it was changed to Hulu Island Commercial Ship Special School. In 1947, it was again changed to Liaohai Commercial Ship Special School. In 1948, it was moved to Beijing. In March of 1949, it was again relocated to Shenyang and merged with Northeast Post and Telecommunication School to become the Northeast Transportation Special School. In the fall of 1949, the pilot and engineer classes were transferred away to become the Northeast Commercial Ship Special School. In 1950, it was moved to Dalian. In May of 1951, its name was changed to Northeast Navigation Institute. It had 3 departments in piloting, engineering, and navigational affairs, as well as a Russian class.

Fujian Navigation Special School was founded in 1952 by combining the navigation special class in Xiamen University and Jimei Water Product and Commercial Ship Special School. It only had a pilot class. Jimei Water Product and Commercial Ship Special School was founded in August of 1951 by splitting from Jimei Water Product and Commercial Ship Professional School, which was originally founded by Mr. Chen Jiageng.

In March of 1953, Shanghai Navigation Institute was moved to Dalian to merge with Northeast Navigation Institute. Dalian Ocean Shipping Institute was thus founded. In September of the same year, Fujian Navigation Special School was merged into it.

The establishment of Dalian Ocean Shipping Institute had changed the appearance of the sea transportation education in China. When the school was initially set up, it had 5 special fields in ship piloting, shipboard power equipment, ship machinery repair, ocean shipping management, and water way and harbor engineering. There were 691 students in school. There were 149 teaching personnel, among them: there were 20 professors, 17 associate professors, 25 lecturers, and 87 assistants and teachers. There were 238 staff members.

In order to better satisfy the needs of the ocean ship industry, the school has made a number of adjustments in the installation of departments and special fields.

In 1953, the waterway and harbor engineering special field was transferred to Dalian Engineering Institute.

/82

 $\overline{\mathcal{N}}$ 

In 1962, the ocean shipping management department was transferred to Shanghai Ocean Shipping Institute.

In 1963 and 1965, respectively, the ship building department and the shipboard machinery department were transferred to Wuhan Water Transportation Engineering Institute. In addition, the port electricity special field at Wuhan Water Transportation Engineering Institute was transferred into Dalian Ocean Shipping Institute.

The size of the school was also continuously increasing. The number of students in school was 1,265 in 1956. It reached 2,053 in 1965.

During the ten year period of Chaos, Dalian Ocean Shipping Institute stopped recruiting for as long as 5 years.

Dalian Ocean Shipping Institute is the cradle for developing high level technical personnel in sea transportation. It has paid alot of attention to training the students to serve the navigation industry in our country. It has been able to grasp advanced navigation techniques and is serious about developing high quality seamen from students. It requires that the students should have a strict sense for organization and discipline. They have high spirits in patriotism and internationalism.

Students of the Navigation Department of Dalian Ocean Shipping Institute were on board their practice ship for a drill.



Dalian Ocean Shipping Institute has always been cautious about retaining teachers with both theoretical understanding and practical experience. It is serious about the important effect of teachers in the teaching process. Furthermore, it is very much concerned about the development and improvement of the quality of the teachers. Since its founding, many teachers have been sent abroad to study. In recent years, there have been over 20 teachers going to countries such as Japan, Germany, Italy, Norway, Belgium, and Holland to study, observe, and carry out academic exchange.

For 27 years, Dalian Ocean Shipping Institute has raised near 8,000 undergraduate students and graduate students for our country. It also developed over 200 foreign students for countries such as Korea, Vietnam, Albania, and Tanzania.

The institute has set up a navigational science research institute and 3 research offices in comprehensive guidance, engineering automation, and new technologies for ships.

While doing their teaching job well, the entire faculty members of the institute and the teaching assistants are actively involved in scientific research activities. It had worked together with Dalian Ship Building Yard to design the Model XESDJ58/100 low speed diesel engine. It received an award in the 1978 national scientific meeting. The Model H-735 shipboard navigation radar and the Xiangyang Model III automatic steering apparatus developed by the institute received awards from the Ministry of Transportation and Lu-Da Scientific Conference.

Currently, the school has 4 departments in navigation, engineering, ship automation, and electronic engineering. Under these departments, there are 7 special fields. According to the nature of the special fields, they can be divided into 2 types:

Ocean Transportation Management Category (including 4 special fields) Ocean Vessel Piloting Special Field

Engine Control Special Field Shipboard Electrical Work Special Field Shipboard Radio Telecommunication Special Field Ship Engineering Category (including 3 special fields) Ship Automation Special Field Electronic Computer Special Field Snipboard Radio Technology Special Field

With the exception that the program for the engine control special field is five years, the remaining special fields are four years.

In 1980, there were 2,648 undergraduate students and 13 graduate students in school. In addition, there were 288 students in advanced study classes or in training for the local organizations.

The entire institute has 1,654 faculty and staff members. Among them, there are 578 full-time teachers. In the full-time teachers and scientific research personnel, there are 3 professors, 54 associate professors, 282 lecturers, 71 teachers, and 168 assistants.

The entire school has 41 laboratories. They are equipped with electronic computers, electronic navigational equipment, sattlelite guidance receivers, and instrument and equipment used in audiovisual education programs. Furthermore, in 1980, it built specia<sup>1</sup> laboratories to simulate navigation as well as to simulate the internal combustion engine room.

In order to allow the students to adapt to the living condition on the sea and to train them about the basic skills in sailing, the school has built an indoor pool and a water training station. They are used for boating, sailing, and swimming according to the regulation of the international seamen association.

In order to enable the students to go on practice, the school runs a practice factory and an electronic ship. It owns a ten thousand ton experimental ship "Yuhong" and a 400 ton vessel as the base to carry out teaching practices.

<u>``</u>\

The Library currently has 340 thousand volumes of books (among them, there are over 60 thousand foreign books), and over 1,200 periodicals. Presently it is building a 7,000 square meter library building. It is equipped with various reading rooms and scientific research activity rooms to be used by students and teachers for studying and academic activities.

The publications include ((Journal of Dalian Ocean Shipping Institute)) and ((Foreign Navigational Technology)).

In recent years, the school has compiled over 400 kinds of teaching materials on its own. Among them, ((Fundamental English)) has already been listed as one of the teaching materials recommended by the Ministry of Education for use in technical schools. The ((English-Chinese Shipboard Engine and Electrical Work Dictionary)) and ((English-Chinese Navigation Dictionary)) have already been published. These are the first set of ocean ship technical tools officially published in our country.

Dalian Ocean Shipping Institute is located by Lingshui Bridge southwest of the city of Dalian. It is next to the mountains and is next to the ocean. The view is beautiful. There is a good learning environment. The school occupies 650 acres of land. Currently, the building space is over 120 thousand square meters.

The ten thousand ton experimental ship "Yuhong" of Dalian Ocean Shipping Institute.

**为事者以后于**和前半月前年没生活的。 13月1日,中国、这世生主义、这些大学出现的 **社会和我们的主义的工作的大批**相当

The school also has a correspondence division and a part-time college. It also has an affiliated middle and elementary school

239

which operates a ten year program.

In addition, there is a printing shop, a hospital, a club, a nursery school, shops, and cafeterias.

School Anniversary Date: March 20th Current President: Zhu Jie Secretary of Party Committee: Li Jintian

# SHENYANG AGRICULTURAL INSTITUTE School Address: Dongling, Shenyang, Liaoning

Shenyang Agricultural Institute was originally founded in 1948. In 1950, it was merged into Harbin Agricultural Institute and the name was changed to Northeast Agriculture Institute.

In order to satisfy the needs of the large scale socialist economic construction, during the reorganization of the schools and departments of all the higher learning education institutions in the nation in 1952, a portion of the original Shenyang Agriculture Institute was moved back from Northeast Agriculture Institute. Furthermore, the entire agriculture school of Shanghai Fudan University (founded in 1940) was moved to Shenyang. The merge resulted in the establishment of the present Shenyang Agriculture Institute. To date, the institute has been founded for 28 years. Including its predecessor, it has 40 years of history.

During the intitial period after its founding, the institute had 8 special fields in agriculture, agricultural product processing, fruit and vegetable, ornamental plant, soil and agricultural chemistry, plant protection, farm land irrigation, and agricultural economics, as well as 1 special class of farm management. There were 658 undergraduate students and 37 special students, as well as 88 teachers (17 professors, 6 associate professors, 14 lecturers, and 51 assistants), 72 staff members, and 97 workers. In the fall of 1953, Kiuzhan Agriculture School in Jilin was merged into it as the irrigation special class. A total of 26 seniors in the agricultural economics department in the agriculture school of Sichuan University were transferred into the agricultural economics department.

/84

Along with the development of education, toward the end of 1965, there were 429 teachers (among them: 14 professors, 11 associate professors, 100 lecturers, 22 teachers, and 282 assistants), 58 assisting personnel in teaching, and 1,663 staff members and workers (including the employees at the experimental farm). The number of students in school had reached to over 3,500.

\_\_\_\_\_

Before 1966, it had developed over seven thousand college graduates and 19 graduate students. There had been 12 foreign students from Korea, East Germany, Russia, Vietnam, and Mongolia.

Since its inception until 1966, encouraging results had been obtained in both teaching and scientific research. However, during the ten year period of chaos, the institute was forced to relocate many times. It was scattered all over the place in the province. The teaching and research equipment was divided. The school buildings were occupied by factories. The experimental farm was surrendered. It was seriously damanged.

After the "Gang of Four" was crushed, the institute received a new lease on life. In the spring of 1978, it was officially restored and moved to the original site. Now, the faculty and students of the entire institute are working very hard toward the goals of improving quality of teaching and obtaining more research accomplishments.

Shenyang Agriculture Institute is under the dual leadership of the Ministry of Agriculture and the Province of Liaoning. The Ministry of Agriculture is the primary one.

It currently has 9 departments, 1 fundamental course division, and 19 special fields.

Agriculture Department

Agriculture Special Field

Agricultural Meteorology Special Field

Plant Protection Department

Plant Protection Special Field

Entomology Special Field

Soil and Agricultural Chemistry Department

Soil and Agricultural Chemistry Special Field Horticulture Department

Fruit Tree Special Field

Vegetable Special Field

Forestry Department

Forestry Special Field

Agricultural Economics Department

Agricultural Economics Special Field

Livestock Farming and Veterinary Medicine Department Livestock Farming Special Field

Veterinary Medicine Special Field

Agricultural Machinery Department

Agriculture Mechanization Special Field Agricultural Machinery Design and Manufacturing Special Field

Tractor Design and Manufacturing Special Field Agriculture Electrification Special Field

Farmland Irrigation Department

Farmland Irrigation Engineering Special Field Irrigation Engineering Construction Special Field Fundamental Division

Plant Physiology and Biochemistry Special Field Agricultural Biology and Physics Special Field

The undergraduate students in all the current special fields with the exception of the veterinary medicine special field which is five years, are working in a four year program.

In 1980, there were 1,848 undergraduate students in school. In addition, there were 57 locally recruited students, 7 graduate students, and 169 students in the agricultural cadre training class.

It currently has 1,037 faculty and staff members; among them, 657 are full-time teachers. Among the full-time faculty members, there are 14 professors, 79 associate professors, 307 lecturers, 107 teachers, 150 assistants, and 1 externally retained professor.

In the recent two years, it has participated in the editing of 7 types of teaching materials as the responsible organization and 10 types of teaching materials as an associate editing organization.

The institute has: a genetics study office, agricultural ecological system study office, crop rust disease immunity study room, soil richness study room, vegetable study room, agricultural economics study office, and a plant physiology and biochemistry

laboratory. In the scientific research area, it has already accomplished alot. In 1977, there were 16 items rated to be important scientific accomplishments in the province of Liaoning, including the analysis of the variation of the physiology of wheat stem rust germs and the breeding of rust resistant species, pattern and prevention of underground insect damage, fast neutron irradiation technique to accelerate the production of insect eggs, using red eye bee to prevent corn moth, application of plant hormone in agriculture, refrigeration and fast freezing techniques for vegetables, grooming of young apple trees, application of boron fertilizer, study of Fushun Xiayan fertilizer, general survey of the soil in Liaoning, English-Chinese Agriculture Technical Dictionary, the pattern and prevention of soy bean core eating worm, the pattern and prevention of sticky worm, Tiefong No. 8 soy bean, and development of new species of fine lamb wool in the Northeast. Among them, the wheat stem rust disease and red eye bee projects received awards in the 1978 national scientific meeting. In 1979, the following two projects received scientific research accomplishment awards of the second class in the province of Liaoning: the discovery of the new wheat stem rust species  $34C_3$  and the study of scarab in the Liaoning area. It also participated in the study of the multiplication techniques of shortening the apple tree. It was also rated as one of the significant scientific accomplishments in the province of Liaoning. It was given a third class award.

Those who contributed to the teaching and research work include:

2000001 1 200000

Pedologist and President Chen Engeng has carried out systematic study on soil geography, soil fertility, and soil improvement, and obtained good results. Especially, the improvement of soil with soda salt has obtained significant effect in extended application. Recently, he used a comprehensive study method to determine the soil fertility of farmland and obtained good results. There are approximately over forty important publications. /85

The work of the provincial special class labor model, the plant pathologist, Professor Wu Yusan - "the variation of wheat stem rust germ and the breeding of rust resistant species" received the important scientific accomplishment in the province of Liaoning in 1977 and the national scientific meeting award in 1978. His "discovery of the new 34C<sub>3</sub> type of wheat stem rust" was rated as one of the most important technical accomplishments in the province in 1979. It was given the second class award in the province and a first class award by the Ministry of Agriculture.

Professor Wu Yusan, plant pathologist at Shenyang Agriculture Institute, observing the growth of wheat.



The rice specialist, professor Yang Shuren is very experienced in planting and breeding rice. He has promoted returning rice straw to the field, single direction concentrated planting, and replanting the seedlings. He also encouraged using soil with high fertility to breed seedlings. He has been responsible for the development of new species such as "thousand waves," "Shen Nong 1032," "Shen Nong 1033," etc.

The biological statistician, professor Zhao Renrong, has contributed significantly in biological statistics and field experiments. He has published over 20 articles such as "theory and practice of biological statistics," "experimental statistical method of large field crops," "introduction to methods used in field experiment," and "variable analysis of percentile."

**Professor Tan Qimeng is a famous vegetable seed selection expert. He has significant accomplishments in the research of**  genetic breeding. In 1958, he selected the "Shen Nong No. 2" tomato which has the characteristics of early riping and large crop. It has been chosen by over a dozen provinces and cities as the major breed to plant in the early ripening category. Since 1970, he began his breeding work on Chinese cabbage. He has already successfully developed new species such as "return home in 60 days," "little green mouth," "Qing Bang River Head," and "Qing Ma Ye."

Professor Zhang Yuming is an expert in planting fruit trees. He is responsible for teaching the course "cultivation of fruit trees" as well as seminars in fruit tree topics. The teaching materials edited as the chief editor and associate editor include "fruit tree cultivation" (overall summary) and "planting apples." He has developed the new "Shen Nong No. 2" apple. It has large crops and good cold resistant characteristics. It was promoted in and out of the province.

Professor Tang Yaoxian has studied the pattern of water movement in brown soil and was the author of the book "agricultural pedology." Furthermore, together with Professor Chen Enfeng, he is the co-editor of the ((Communications in Soil)) published by the Chinese Pedological Society.

Students at Shenyang Agriculture Institute doing an experiment in botany



The publications of the institute include ((Journal of Shenyang Agriculture Institute)), ((Communications in Soil)), and ((New Agriculture)).

The library has a collection of nearly 380 thousand volumes, of which there are over 67,000 foreign books. There are 3,200 periodicals. It is the key library of agricultural technical books in the province.

The institute has instruments and equipment, such as 15 universal microscopes, atomic abosrption spectrometer, dual channel counter, nitrogents analyzer, closed circuit television equipment, universal material testing machines, and spectrophotometer, for use in teaching and scientific research. In addition, there are sets of color video recording equipment and special audio visual classrooms. They provide the proper conditions for teaching and for promoting academic activities.

The institute owns a ten thousand acre comprehensive experimental farm. It has over 6 thousand acres of farmland, research land and vegetable gardens. There is a fruit tree area which occupies 500 acres. There is a botanical garden which occupies over 200 acres and has over 400 kinds of trees from in and out of the province. There is also a livestock farm breeding hogs, chickens, ducks, dairy cows, deer, and horses. There are teams in tussah production and scientific research experiments. In addition, there are mechanized working teams, an agricultural machinery repair plant, a comprehensive processing plant, and a poultry slaughtering and processing plant.

Furthermore, it has its own affiliated middle and elementary schools, a health center, a kindergarten, a printing plant, an agricultural machine repair factory, and an animal medicine factory. In addition, it operates a television college and an evening college.

The campus occupies 2,000 acres of land. The building space currently occupies 120 thousand square meters. Presently, it is building a teaching and experimentation building which has over 10 thousand square meters of space and a dormitory for faculty and staff members of over 10 thousand square meters' space. In the meantime, the old school buildings are actively being maintained.

In recent years, the institute has been actively involved in opening up various academic activities. It has been retaining excellent scientists and foreign scholars to give lectures in the institute. In the meantime, it has selected excellent teachers to study, observe, and carry out research work in higher education institutions and research organizations in the United States and Canada. Furthermore, scholars from universities in the United States and Canada also visited the institute on tours and seminars. Presently, the institute has already established cooperative relationships in academic and scientific research activities with Iowa State University in the United States. The friendship and interaction with foreign scholars are promoted through these activities. It has a good effect on teaching and scientific research.

Shenyang Agriculture Institute has been continuously expanding. It has already become a multi-disciplinary socialist agriculture university.

/86

School Anniversary Date: October 11th Current President: Chen En Feng Secretary of Party Committee: Liang Qiu

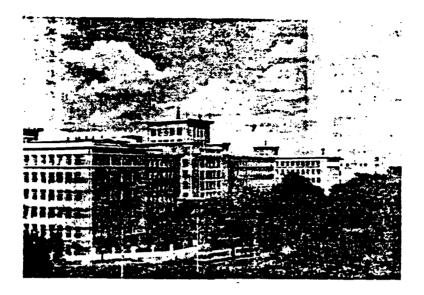
## JILIN PROVINCE



### JILIN UNIVERSITY

School Address: Liberation Avenue, Changchun, Jilin

The predecessor of Jilin University was Northeast Administrative Institute. It was founded in October 1946 in Harbin. According to the need of the development of the revolutionary situation back then, the major task of the school was to train administrative cadres. Outlook of the teaching area in Jilin University.



In May 1948, Harbin University and Northeast Administrative Institute were merged to become Northeast Science Institute. It had departments and classes in science and engineering, agriculture and forestry, medicine, education, arts and drama, administration, and public safety. After Shenyang was liberated, it was moved to Shenyang in November. The name was restored to Northeast Administrative Institute. It had set up departments such as administration, education, justice, finance, banking and accounting, and factory management. It also had special classes in Russian and accounting, as well as a culture training class for industrial and agricultural cadres.

In September of 1950, the name of the school was changed to Northeast People's University. Furthermore, it was moved from Shenyang to Changchun.

In October of 1952, the higher learning organizations in the nations were reorganized. The students from the mathematics departments and physics departments of Dalian Engineering Institute and Northeast Engineering Institute were transferred into Northeast People's University. Furthermore, over 30 famous professors and scholars were selected from Beijing University, Qing Hua University, and Yanjing University to teach at the school. The school established 3 science departments in mathematics, physics and

chemistry. In literature and arts areas, it was reorganized, on the basis of the original foundation, into 5 departments in Chinese literature, history, economics, law, and Russian. Since then, it became a comprehensive university.

In August of 1958, according to the decision made by the State Council to change the leadership system, Northeast People's University was changed to Jilin University. It was placed under the jurisdiction of the Ministry of Education. It added 7 departments in philosophy, semiconductor, foreign language, atomic energy, biology, radio electronics, and computer science. In 1962, the policy of "adjust, reinforce, fulfill, improve" was executed. The 3 departments of atomic energy, biology, and radio electronics were abolished. The related special fields were consolidated into the physics department and chemistry department.

The ten year period of chaos made Jilin University suffer from serious damages. After the "Gang of Four" was crushed, through restoration and reorganization, the school entered a stage of stable development. Currently, it is one of the better higher learning institutions in terms of quality in teaching.

Jilin University currently has 11 departments and 28 special fields.

Chinese Language and Literature Department

Chinese Language and Literature Special Field History Department Chinese History Special Field Archaeology Special Field

Philosophy Department

Philosophy Special Field

Dialectics of Nature Special Field

Economics Department

Political Economics Special Field Economical Management Special Field World Economics Special Field

Law Department

Law Special Field International Law Special Field

Foreign Language and Literature Department English Language and Literature Special Field Japanese Language and Literature Special Field Russian Language and Literature Special Field Mathematics Department Mathematics Special Field Computational Mathematics Special Field Applied Mathematics Special Field Physics Department Physics Special Field Mechanics Special Field Nuclear Physics Special Field Chemistry Department Chemistry Special Field Physical Chemistry Special Field Biochemistry Special Field Ecology Special Field Semiconductor Department Semiconductor Physics and Device Special Field Semiconductor Chemistry Special Field

/87

Computer Department

Radio Electronics Special Field Computer System Structure Special Field Computer Software Special Field

The undergraduate program for the 3 special fields in physical chemistry, biochemistry, and semiconductor chemistry is five years. The remaining special fields are four years. The graduate students are either on a two or four year program.

In 1980, there were 4,468 undergraduate students, 225 graduate students, and 185 advanced study students in school.

There are 3,042 faculty and staff members in school; among them, 1,078 are full-time teachers and 244 are full-time scientific research personnel. There are 24 professors, 91 associate professors, 720 lecturers, and 487 teachers and assistants among teaching and research staff members.

During the initial period after Jilin University was founded, the president was Lin Feng who was also the vice chairman of the Northeast People's Government. Later on, Wang Yifu, Lu Zhenyu, Guan Yaming, Liu Jin, etc. were responsible for the leadership work at the school. The school retained a number of scholars and professors who are knowledgeable and rigorous in their work. For example, Tang Aoqing, Wang Xianghao, Yu Ruihuang, and Cai Liusheng have stayed on the first line of scientific research for a long time. They are responsible for the important leading jobs for the school, the departments, and the institutes. There are also a number of professors and associate professors who have already become the leaders in their own disciplines. Under their leadership, a strong teaching and research team has been formed.

After it was changed to a comprehensive university in 1952, Jilin University has paid alot of attention to the teaching of basic theories and fundamental knowledge and the training of basic skills. Of theover 20 thousand undergraduate and graduate students who have already graduated, most of them have already become the backbones in socialist construction.

In order to raise the quality of teaching, and to meet the needs of economic construction of the country, Jilin University has been emphasizing scientific research. As early as 1955, it established a humanity committee and a natural science committee. It publishes ((Journal of Humanities)) and ((Journal of Natural Sciences)). In the late fifties to the early sixties, it also established special research organizations to be staffed with full-time research personnel to undertake important research projects for the nation and the local government. The research organizations back then included: mathematics study office, metal physics and x-ray crystallography laboratory, material structure laboratory, chemical kinetics laboratory, infrared physics and infrared technology laboratory, semiconductor physics and device laboratory, and foreign problem research office. In 1961 to 1966 alone, there were over 130 research projects in sciences. There were nearly 300 research topics. Over 200 research topics resulted in significant accomplishments.

As for the scientific research organizations set up at Jilin University, in the area of sciences, there are theoretical chemistry institute, mathematics institute, atomic and molecular physics

institute, metal physics and x-ray crystallography laboratory, catalytic reaction and kinetics laboratory, semiconductor physics and device laboratory, and computer science laboratory. In the human sciences, there are a Japanese institute, Korean study office, Indian study office, population theory research office, Chinese-Japanese dictionary editing office, as well as other study offices in classical Chinese literature, linguistics, history of the Qin Dynasty, history of the Northeast, ancient languages, imperialist economic theory, Russian philosophy, Marxist philosophical publications, history of Chinese law, foreign law, foreign language, and scientific socialism.

In the recent three years, the science department has obtained 75 research results. Among them, 30 were important ones. In humanity, in 1979 alone, there were over 110 items of research accomplishments. Among them, there were 50 papers which were presented in the social science academic meeting held by the province of Jilin. They were all honored with certificates.

In the 1978 national scientific meeting, Jilin University was given awards for 23 projects. Professors Tang Aoqing, Wu Shishu, and Gu Qingquan were evaluated to be advanced technical workers. The material structure and catalytic kinetics laboratories were rated as advanced technical units.

In the teaching and research work, many experts and professors worked very hard to overcome many difficulties in order to contribute.

President of Jilin University, Professor Tang Aoqing.



Professor Tang Aoqing was honored to receive . prize from the Chinese Academy of Sciences for his study on the pattern of "intra-molecular rotation" in the structure of materials in the fifties. He had obtained important results in the study of macromolecular statistical theory. In the sixties, the material structure discussion group, which was led by him, obtained accomplishments in the study of "potential field theory." In the seventies, the group led by him proposed a new calculation method and formula based on the "molecular orbital symmetry conservation principle" in the study of molecular orbital theory. Furthermore, the theory was brought from a qualitative stage to a semi-quantitative stage. In the study of "molecular orbital pattern theory," they presented the "characteristic value problem in pattern theory." Since the fifties, he has been using various methods such as accepting graduate students, and holding advanced study classes and discussion classes to develop over 200 research personnel in fundamental theories in chemistry.

Professor Wang Xianghao was studying algebra in his early years. He provided added proof to the Glen Weld Theorem so that the theorem was perfected. In recent years, he has been involved in the study of computer science. In his artificial intelligence study, he has already obtained two accomplishments in "generalized summarization principle" and the "summarization method without taking any factors."

In the thirties, Professor Yu Ruihuang began his study of x-ray crystallography and x-ray synthesis. In the recent decade, he has devoted himself to the study of a new electron theory for solids and molecules. He has written and published over a dozen papers and obtained new results.

Professor Cai Liusheng has been involved in the research of photochemistry, chemical kinetics, and laser chemistry for a long time. He has been teaching for over 50 years. He has been the chairman of the chemistry department over a long period of time and has contributed toward developing special personnel in chemistry for our country.

Professor Wu Shishu has been studying the theory of nuclear structure since the fifties. In the study of polynuclei theory,

/88

he has obtained significant results. The studies of the Gelin function method and the single particle trap in nucleus have reached international standard.

Ŝ

Professor Gu Qingquau is specialized in studying atomic and molecular physics, and solid state physics. He has published close to 30 papers such as ((Analytical Wave Function of Atoms)), ((Theoretical Calculation of the Scattering Cross-sections of Collisions Between a Slow Electron With Nitrogen, Oxygen, and Neon Atoms)), and ((Synthetic Mechanism of Artificial Diamond)). Furthermore, he has published 5 special publications such as ((Atomic Physics)) and ((Simple Teaching Schedule in Solid State Physics)).

Professor Xu Lizhi has been actively engaged in scientific research for many years. He has published over 80 papers in the 5 areas related to approximation analysis, higher order numerical integration, approximation of multi-element functions, large range iteration method, and series transformation and reverse transformation. Moreover, he has published two special books: ((Approximate Integration and Integration by Approximation)) and ((Higher Order Numerical Integration)).

Professor Zhang Xongru has written ((Correction after Reading Lao Zi)) in the literature before the Qin Dynasty. In the area of commenting poems, he has written ((Talking about Creation of Poetry)), ((Poetry Needs Imagination)), ((Classical Poetry)), etc. Furthermore, he has published many pieces of work.

Professor Yu Shenwu has significant achievements in the study of inscriptions on bones of the Shang Dynasty and inscriptions on ancient bronze objects. The 13 major publications include ((New Proof of Zhu Zi)), ((Yin Dynasty Contract)), ((Inscription on Bronze in the Shang and Zhou Dynasties)), ((Translations of Inscriptions on Bones)), ((Selected Articles Inscribed on Bronze Objects)), ((New Proof of Shijin)), ((New Proof of Lunyu)), and ((New Proof of Chuci)). Currently, he is in charge of editing ((Classification of Inscriptions on Bones in the Shang Dynasty)) for the China Publishing Company.

Professor Guan Xijue has been studying Marxist political economics and world economic problems over a long period of time. After the country was liberated, he published eight books including ((Nationally Monopolized Capitalism and the American Economic Crisis)), ((Multi-National Companies in the United States)), and ((Regarding the Problems of Socialist Expansion of Re-production)). In recent years, he has also published over a dozen papers such as ((Several Problems Related to the Reform of Economic Systems in our Country)).

a a a a start a frank a frank a start a

In addition, there are a number of elder and middle age teachers who have been involved in teaching and research for a long time. They write books and publish papers, as well as train people. They also have accomplished alot. In the science area, they include professors Jiang Zejian, Wang Rou Huai, Sun Jiazhong, and Jiang Yuansheng. In humanities, they include professors Jin Jinfang, Gao Heqing, and associate professor Li Shiyue.

Jilin University is serious about academic exchange with foreign countries. In recent years, it has established school to school academic exchange relations with several universities abroad. In addition to inviting famous foreign experts and scholars to give lectures, famous foreign scholars were retained as honorary professors and visiting professors of the university. Currently, there are 9 foreign experts and scholars teaching in the 2 special fields in English and Japanese. In recent years, it has also sent experts and scholars abroad to attend international academic meetings, to lecture, and to participate in research work. Furthermore, there are over 40 backbone teachers and students who are studying in 9 foreign countries.

The school has a total of 98 laboratories. It owns a number of advanced instruments and equipment, as well as video recording systems, simultaneous interpretation apparatus, and language audiovisual rooms.

The affiliated organizations of the university include a hospital, a printing shop, a machine shop, a farm, an elementary school, and a nursery school.

Jilin University library currently has over 1.5 million Chinese and foreign books. Among them, there are 470 thousand scientific books, 490 thousand humanities books, and 320 thread bound books.

There are over 2,840 kinds of new periodicals and 220 thousand volumes of bound periodicals. In addition, there is a foreign teaching material reading room. The Ministry of Education is responsible for introducing the teaching materials and reference books from foreign higher learning techincal schools to be used by teachers in the higher learning institutions in the Northeast Region.

Jilin University occupies 395 acres of land. The building space is over 200 thousand square meters.

Current President: Tang Aoqing Secretary of Party Committee: Hu Shaozu

#### JILIN POLYTECH UNIVERSITY

SCAREE DOGDESSE

Contraction American

School Address: Nanling, Changchun, Jilin

The original name of the Jilin Polytech University was Changchun Tractor Institute. It was a new engineering college founded in 1955. It was created by merging the automobile special field of Shanghai Jiaotong University, the automobile department and the internal combustion engine department of Huazhong Engineering Institute, and the automobile engineering department of Shandong Engineering Institute. Back then, there were only two departments with special fields in automobile, tractor, internal combustion engine, agricultural machinery, mechanical manufacturing technology and equipment, and economics and organization of mechanical manufacturing industries. There were over 1,470 students and 180 teachers. Among the teachers, it had famous professors with expertise in automobile and internal combustion engines, including Huang Shupei, Dai Guirui, Fang Chuanliu, Yu Kejing, Zhang Hua, Chen Bingcong, Luo Bangjie, and Jing Guangsheng. It was under the jurisdiction of the First Mechanical Industry Ministry.

In August of 1958, the name of the school was changed to Jilin Polytech University. It added special fields such as casting, electrical engineering, petroleum, mining machinery, metallurgy, mining, forging, metallography, electrification and automation of industry and business, precision instrument, and automatic motion. In the winter of 1960, in order to further strengthen the leadership of the school, the school was placed under the guidance of the

/89

Ministry of Education, Ministry of Agricultural Machinery, and the Jilin Province with the approval of the State Council. The Ministry of Agricultural Machinery was the primary party. In 1961, it again added special fields in radio, irrigation and chaining machinery, mathematics, physics, and mechanics. Until then, the school had already developed into a school with 8 departments, 24 special fields, and nearly 5 thousand students. It was a multidisciplinary engineering college primarily in mechanical and electrical engineering.

In 1962, the policy of "adjust, reinforce, fulfill, improve" was thoroughly executed. The special fields were reorganized. The special fields in precision instrument, automatic motion, petroleum, mathematics, physics, and mechanics were abolished. The students were transferred to related special fields in other institutions. The faculty, students, and equipment of the 3 special fields in mining, metallurgy, and mining machinery were transferred away entirely to form Jilin Mining and Smelting Institute. The faculty and students of the irrigation and draining machinery special field and the internal combustion water pump laboratory were reorganized to Zhenjiang Agriculture Machinery Institute. Until 1966, the school maintained 15 special fields. There were 4,750 students in school, including undergraduate students, graduate students, and foreign students. There were 790 teachers.

Since its inception, the nation has been concerned about the development of the school. In order to train teachers to raise the quality of teaching and the academic level, it has retained foreign experts in the special fields of tractor, automobile, manufacturing technology, and motor vehicle utilization to teach at the school on a long term basis. Furthermore, it has developed a number of batches of graduate students. Since 1958, the school has been choosing excellent young teachers to advance their studies abroad or in other institutions in the country. The experts retained domestically are such as Professor Wu Cunya, who arrived at the school to strengthen the faculty team. Furthermore, a number of backbone teachers have been developed from teachers with better fundamentals. The faculty team is continuously growing and strengthening. The quality of teaching and academic level continues to improve. It has considerable foundation in terms of teaching

equipment and library information. Before 1966, it had already become a high quality university in terms of teaching.

Between 1966 and 1976, the school was seriously damaged. It did not accept any students for 4 years. In June 1970, Jilin Engineering Institute was merged into Jilin Polytech University. The school was placed under the jurisdiction of the Province of Jilin.

In 1978, with the approval of the State Council, Jilin Polytech University was placed under the dual leadership of the First Mechanical Industry Ministry and the Province of Jilin. The First Mechanical Industry Ministry was the primary party. In November, of the same year, Jilin Engineering Institute was again transferred away. It was restored at the original site. The school was placed under the leadership of the Ministry of Agricultural Machinery.

In the 25 years since its founding, Jilin Polytech University has already trained 15,024 undergraduates, 38 graduate students, 89 foreign students, and 1,358 evening college and correspondence students for our country. In addition, it has trained over 12 thousand cadres and workers on duty. They were sent all over the country working in large and medium scale industries in automobile, agricultural machinery, tractor, internal combustion engines and mechanical manufacturing, as well as in higher education institutions and scientific research organizations. Most of them have already become technical backbones. They are actively involved in contributing to the socialist construction for our country.

In the development process of the school, Jilin Polytech University has already gradually established its own tradition and characteristics. During the initial period after its inception, the school inherited the tradition and atmosphere of the original three schools - Jiaotong University, Huizhong Engineering Institute, and Shandong Engineering Institute. The faculty and students work very hard. The school has strict requirements imposed on students. It insists on holding "three barriers" (i.e. entrance, leaving behind, and graduation) in order to ensure the quality of students. When the first class students graduated in 1956, the school organized a graduate design examination committee with the participation of domestic and foreign experts. According to the requirements of the engineer, each design was evaluated rigorously. Furthermore, it is serious about teaching fundamental theories and doing basic training for engineers. Currently, the school has already established the characteristic centered around agricultural machine engineering and vehicular engineering courses. The special fields include mechanical engineering, electronic engineering, management engineering, and multi-disciplinary engineering mathematics and science courses. The key special fields are agricultural machinery, internal combustion engines, tractor, automobile, motor vehicle transportation engineering, and business management engineering. These special fields have been set up early in our country. The teaching team is strong. The information and data are abundant and the experimental conditions are good. It is capable of training high level special personnel to undertake and solve the technical problems in these areas independently.

/90

Currently, the entire school has 8 departments according to the engineering disciplines, 22 special fields and 1 fundamental division.

First Mechanical Engineering Department

Casting Special Field Forging Special Field Welding Special Field Metallic Material Special Field

Second Mechanical Engineering Department

Mechanical Manufacturing Technology Equipment and Automation Special Field

Engineering Machinery Department

Engineering Machinery Special Field Mining Machinery Special Field

Hydraulic Transmission and Control Special Field

Agricultural Machinery Engineering Department

Agricultural Machinery Special Field Livestock Farming Machinery Special Field Tractor Special Field

Automobile Engineering Department

Automobile Special Field

Motor Vehicle Transportation Engineering Special Field Internal Combustion Special Field Electronic Engineering Department

Industrial Electric Automation Special Field Electronic Computer and Its Application Special Field Electronic Instrument and Monitoring Technique Special Field Management Engineering Department

Mechanical Manufacturing Management Engineering Special Field

Technical Information Special Field

Mathematics and Science Department

Applied Mathematics Special Field

Applied Physics Special Field

Applied Mechanics Special Field

Fundamental Division

Since 1977, all the undergraduate special fields are operating on a four year system. Beginning from 1978, it resumed accepting graduate students. Currently, the whole school has 14 special fields accepting graduate students. The programs are divided into four, three, and two years. The original evening college and correspondence college also gradually restored accepting students.

In 1980, there were 3,466 undergraduate students, 83 graduate students, and 6 foreign students in school. There were 2,368 faculty and staff members, among them 846 are full-time teachers. Among the teachers, there were 10 professors, 120 associate professors, 448 lecturers, and 268 teachers and assistants.

In recent years, the school has achieved significantly in the area of scientific research. For example, the results of the rolling and forging forming technology and its automatic production line, x-ray television diagnosis machine, x-ray metal damage television, low temperature plating of iron, and chain driving mechanism have received the attention and were given awards by our country. In terms of fundamental theory study, development has been made in soil-agricultural system mechanics, surfacevehicular system mechanics, agricultural machine group theory, and cultivation techniques. In 1978, 10 research projects received the praise in the national scientific meeting. 13 projects were encouraged by the Central Ministries and Committees. 72 projects were praised by the Province of Jilin and the City of Changchun. The special research organizations set up by the school include the rolling and forging technology institute, and 7 independent laboratories in chain transmissions, automobile-surface mechanics, soil-agricultural machine system mechanics, cultivating machinery, information detection technique, system engineering, and technical information. They undertake research work for related organizations.

In order to exchange technology and teaching information with the outside, Jilin Polytech University publishes 5 periodicals such as the ((Journal of Jilin Polytech University)).

In recent years, there have been close to 30 professors and experts from countries such as Japan, the United States, and Canada who came to the school to give lectures. There have been over 100 foreign visitors. In 1979, it established a school to school academic exchange relation with Minnesota University in the United States. It also established a relation with Kyoto University in Japan to open up academic exchange activities. The school has sent vice-president Wu Cuanya and Professor Chen Bingcon and ten other people to visit and study in countries such as the United States, Japan, West Germany, Canada, Italy, Austria, Romania, Yugoslavia, etc.. These activities promote the friendship between Jilin Polytech University and foreign scholars. In the meantime, it has a promotional effect on the teaching and research work at the university.

The library currently has over 760 thousand volumes of books and periodicals, of which there are 540 thousand Chinese books, 120 thousand foreign books, and over 100 thousand bound volumes of periodicals. In addition, there are various technical information and data. It subscribes to over 1,800 kinds of periodicals, of which over 1,300 are foreign. A 11,000 square meter new library building is under construction now. There will be over 1,500 seats in the reading rooms for teachers and students. It also has corresponding modernized equipment to provide a better learning and academic activity place for the teachers and students.

It currently has 30 comprehensive laboratories. It owns electronic computers and other various computational and testing instruments and equipment for use in teaching and research. In addition, there are sets of audiovisual equipment such as color

video recorders for use in teaching and academic activities. In order to strengthen the teaching of fundamental theoretical courses, in recent years it has purchased a number of pieces of experimental equipment for the fundamental courses to gradually improve the quality of teaching fundamental courses.

The school also has a mechanical manufacturing shop, which is the base for carrying out teaching practice, developmental fabrications, and teaching equipment processing. In the meantime, teaching and production are combined to manufacture some mechanical products.

In the university, there is an employee elementary school, a nursery school, and a school medical center with 80 beds. They provide convenience to the welfare of the staff.

The school occupies nearly 292 acres of land. The current building area is over 190 thousand square meters.

Jilin Polytech University built itself as a teaching center as well as a scientific research center according to the needs of "Four Modernizations" construction by accelerating the construction speed, grasping the build-up of the teaching team, and renewing the testing measure. It is contributing even more significantly to the "Four Modernizations" for the nation.

> School Anniversary Date: September 26. Current President and Secretary of Party Committee: Lu Jin.

## CHANGCHUN GEOLOGICAL INSTITUTE

School Address: Geology Place, Changchun, Jilin

Changchun Geological Institute was founded in 1952. It was formed by merging the geology and mineral department of Shandong Univeristy, the geological engineering department of Northeast Engineering Institute, and Changchun Geological Special School. It is currently one of the better institutions in geology. It is under the jurisdiction of the Ministry of Geology. /91

Since its inception, the special fields and departments of Changchun Geological Institute has been reorganized many times. For a while, it stopped recruiting any students during the ten year period of chaos. In 1972, it accepted three year system

students. In 1978, it officially returned to the four year undergraduate system. Before 1979, it had 14 special fields. Until 1980, the institute had 5 departments, 8 special fields, and 1 teaching research division for fundamental courses.

Geology Department

Mineral Geological Survey Special Field

Geology Special Field

Hydrogeology and Engineering Geology Department

Hydrogeology Special Field

Engineering Geology Special Field

Applied Geophysics Department

Applied Geophysics Special Field

Geological Instrument Department

Geological Instrument Special Field (heavy object detector) Rock and Mineral Testing and Geochemistry Department

Mining Searching Geochemistry Special Field

Rock and Mineral Analysis Special Field (gravitational instrument analysis)

In 1980, there were 2,824 four year undergraduate students and 70 graduate students (the programs are divided into two, three and four years) in school. In addition, there were 11 foreign students from 6 countries studying at the school.

There are 1,827 faculty and staff members; among them 727 are teachers. Among the teachers, there are 11 professors, 60 associate professors, 351 lecturers, 269 assistants and 36 teachers.

In the 28 years since its founding, it has developed a total of 14,365 undergraduate students, special training students, and various geological technicians, as well as 69 graduate students.

Currently, there are 69 laboratories with a pulse navigation apparatus, digital seismograph, large magnetic tape machine, 500-ton rock tri-axial apparatus, dynamic tri-axial apparatus, laser reflectometer, mass spectrometer, infrared absorption spectrophotometer, 2 meter grating spectrograph, x-ray diffractometer, infrared scanning spectrometer, atomic absorption spectrometer, Mossbauer spectrometer, one one-hundred thousandth analytical balance, universal microscope, and various models of polarized and reflective microscopes and biological microscopes, as well as various electrical testing apparatus from super low frequency to high frequency.

In order to promote the development in teaching and research, a computer station was established in 1979. It owns a domestic model 6912 general purpose digital electronic computer and provides the program design necessary for various calculations in geology. In addition, it also set up an audiovisual teaching study office which was equipped with a color television transmitter, color video recorder, and a color television classroom for 200 people to attend the same class simultaneously.

In order to ensure that the teaching and research at the institute can be carried out smoothly, the institute also has a library, a geological exhibition hall, a technical data and file room, and a printing shop.

The library collects a total of over 420 thousand volumes, in which there are over 130 thousand volumes each in social sciences and natural sciences. There are over 150 thousand volumes in geological sciences. Of the total number of books in the collection, there are 350 thousand Chinese books, and 70 thousand foreign books. A 14,000 square meter library building will begin construction soon.

In order to develop geology, and to exchange the scientific research results in geology, it also publishes ((Journal of Changchun Geological Institute)).

/92

In order to better organize the teaching and research work, it also set up an academic committee.

In 28 years, Changchun Geological Institute has obtained better results in teaching and scientific research. Over the years, it has offered 185 fundamental and special courses of various kinds. The school has edited 688 textbooks. The institute has established 13 laboratories in pre-Cambrian period geology, remote sensing geology, experimental study on existing rocks and minerals, physical exploration method, deep geophysics, physical exploration instrument, mathematical geology, drought and semidrought hydrology, rock mineral testing and techniques. The important accomplishments obtained in scientific research include: In the study of ancient coral, the evolution from four sprout coral to six sprout coral was thoroughly studied. It was discovered that internally forming structured coral was the transition type from four sprout coral into six sprout coral. Consequently, the coral order was established. This discovery had received alot of attention from both foreign and domestic geologists.

In the study of metamorphic rock and metamorphic deposit, a large amount of geological studies has been carried out with respect to the metamorphic rock and the mineral products in five mountain regions in Northern China, including Liaodong peninsula, southern Jilin, Shandong peninsula, eastern Yanshan, eastern Qinling, and Shanxi Wutai Mountains. Theories regarding metamorphison formation, evolution of migmitite to ore deposit, multiple stage metamorphism, and characteristics of early stage evolution of the earth shell, were proposed in order to promote the further development of rock metamorphism, and pre-Cambrian period geology.

In the area of hydrological geology and engineering geology, over the years, theories in geological mechanics have been used in problems related to hydrological geology and engineering geology with success. Especially on the study of regional stability caused by earthquake and method of its evaluation, our own theoretical system and method of study have been preliminarily established.

In the area of developing physical detectors, in 1961, 1965, and 1977 it has developed a nuclear spin magnetic detector, optically pumped magnetic detector, and the pulse electric apparatus, respectively. The development of these detectors has contributed to the detector work significantly. In addition, the successful development of an electromagnetic liquid separator made it possible to obtain better effect on the separation of weakly magnetic and non-magnetic fine minerals. It not only serves as a new instrument to separate minerals in the laboratory, but also improves the technical level of the experiment.

In recent years, study has begun on the Tibet plateau. In southern Tibet, the institute studied the abnormal navigational

magnetic characteristics and the structure in depth. In northern Tibet, it carried out studies on the geological structural characteristics and the evolution of the shell. It began to accumulate information on the geology and geophysics of the Tibet plateau.

In recent years, the institute has participated in 134 national academic meetings. It has presented 371 papers.

The accomplishments in scientific research and teaching at Changchun Geological Institute can not be separated from the strong academic leaders in various disciplines and special fields.

Professor Dong Shenbao is a famous rock expert in our country. His expertise lies in the study of metamorphic rocks. He guided younger teachers to carry out wide and in depth studies on the metamorphic rocks and related mineral products in China prior to the Sinian Period. In addition, in the late fifties, he proposed theoretical viewpoints with regard to metamorphism formation, and the effect of transformation from mixed rock to ore. In recent years, he presented new knowledge with regard to the categories of granite formation, types of metamorphic effect, effect of mineral formation from metamorphism, cause for metamorphic iron ore formation, and characteristics of ancient earth crust evolution. He has published in various journals over a dozen papers. In addition, he has a special publication entitled, ((Metamorphic Effect and Ore Formation)).

Professor Yu Jianzhang is a member of the Earth Academy in the Chinese Academy of Sciences. He is also a committee member of the local section of International Carboniferous Society as well as the vice-president of the institute. He is a famous palaeontologist in our country. His studies of coral in the Palaeozoic Period and the geological layers in the Carboniferous Period have reached relatively high standards. The four coral fossil belts in the late Carboniferous Period in our country, which have been used to date, were established by him. He also established a medium coral group which provided an important clue in the exploration of the evolution from the wrinkled coral in the Palaeozoic Period to the six sprout coral in the Mesozoic Era.

Professor Liu Guochang is a famous scholar in hydrological geology and engineering hydrology. For several decades, he has acquired considerable experience in the study of regional stability. The special articles and papers published have a realistic meaning towards production practices. His research results have a certain promotional effect on the development of this discipline. He has a high reputation in the engineering geology community in the country.

Professor Guo Hongjun has been working on the teaching and research of palaentology in geological strata for a long time. He is an expert in studying trilobite. Over several decades, he has obtained considerable accomplishments in the study of palaeontology in the geological strata in the early Cambrian Period. He has published some important papers and books which were widely acknowledged in and out of the country.

Professor Zhang Qiusheng for many years has been working on the study of geology of the pre-Cambrian Period. He has carried out profound theoretical studies on the pre-Cambrian metamorphic effect and ore formation and rock fossilization and ore formation. Especially, he has divided the metamorphic types in the early Cambrian Period in China. Some of his papers received wide acknowledgement in and out of the country.

Professor Zhang Taixia has alot of experience in the study of rare elements and metal ores. He is especially experienced with metamorphic iron rich ores. His work has been seriously appreciated in and out of the country.

Professor Zhen Xiaojian has been developing geological instruments. Since 1958, he began to develop an aeronautical nuclear spin magnetic meter and was given a national invention award. In 1962, he again developed a sensitized pulsing aeronautical electric meter which was at an advanced level in the world. It received a national scientific meeting award.

Associate professor Shen Ninghua has been involved in magnetic surveying research and teaching for many years. In 1964 he was in charge of editing the teaching material "magnetic detection method" which was published nationally. In addition, he had worked with somebody else to write the paper "Interpretation of Complicated Abnormal Magnetic Phenomena," which was given an award in a national scientific meeting. In 1979, he wrote another paper on "Linear Program to Solve for the Distribution of a Magnetic Source" and presented a new magnetic detection method and a reverse deductive method. It was presented in the national geophysics society meeting.

In the recent three years, the institute has selected 13 teachers to visit, study, and attend international geological meetings in the United States, England, West Germany, Spain, France, Canada, Australia, Czechoslovakia, and Thailand and presented 12 papers. In the meantime, it has received the visits of over 130 geologists from 11 countries such as the United States, England, France, West Germany, Canada, Japan, and Australia. They provided 48 special topic seminars and visited the laboratories related to teaching and research.

The institute also has an employee hospital, a dependent elementary school, kindergarten, and a building repair company to provide fringe benefits.

The institute occupies 202 acres of land. It currently has 170 thousand square meters in total building area, in which over 50 thousand square meters are for classrooms, laboratories, offices, and library buildings.

/93

School Anniversary Date: October 3rd. Current President: Dong Shenbao. Secretary of Party Committee: Guo Enjin.

The Province of Heilongjiang



#### HEILONGJIANG UNIVERSITY

School Address: Xuefu Road, Nangang District, Harbin, Heilongjiang Heilongjiang University was founded on September 25, 1958. The predecessor of Heilongjiang University was Harbin Foreign Language Institute. In 1946, a part of Yan An Foreign Language School was moved to Harbin. Harbin Foreign Language Special School was founded. After the new China was established, the school was developing rapidly. In 1956, with the approval of the State Council, it was changed to Harbin Foreign Language Institute and placed under the leadership of the Ministry of Education. In April of 1958, Harbin Foreign Language Institute was placed under the jurisdiction of the Province of Heilongjiang. In order to suit the needs of the Province of Heilongjiang in the development and construction of its economic and cultural affairs, the People's Government of the Province of Heilongjiang decided to build Heilongjiang University based on Harbin Foreign Language Institute. Liu Zhendong was assigned as the President and First Secretary of Party Committee.

When the school was first founded, it had 7 departments in physics, chemistry, mathematics, biology, philosophy, Chinese, and foreign language. The humanities program was four years, while the science program was five years. In 1960, it established an economics department and a history department.

In 1963, the economics department and history department were terminated. The biology department was merged into Harbin Normal Institute.

During the ten year period of chaos, Heilongjiang University suffered extremely heavy losses. Many experienced teachers and staff members were forced to leave the university. Both teaching equipment and library materials were scattered in large amounts. Even the school building was damaged. The teaching work was interrupted for almost 6 years. In the spring of 1972, it began to resume accepting students. Eack then, there were 8 departments in physics, chemistry, mathematics, philosophy, Chinese, English, Russian and Japanese. The school was divided into 10 special fields. The program was three years.

After the "Gang of Four" was crushed, the atmosphere at the university was drastically refreshed. In 1977, the number of years of study for the undergraduate students was changed back to four years. The department of economics was reinstated. The 3

departments, mathematics, Chinese and Russian, resumed accepting graduate students. The graduate program was three years. Presently, Heilongjiang University has 9 departments and 15 special fields.

Chinese Language and Literature Department

Chinese Language and Literature Special Field Philosophy Department

Philosophy Special Field

Economics Department

Political Economics Special Field

English Department

English Special Field

Russian Department

Russian Special Field

Japanese Department

Japanese Special Field

Mathematics Department

Mathematics Special Field

Computer Software Special Field

Computer Mathematics Special Field

Physics Department

Physics Special Field

Semiconductor Physics and Device Special Field

Radio Electronics Special Field

Chemistry Department

 $\overline{}$ 

Chemistry Special Field

Macromolecular Chemistry Special Field

Organic Chemistry Special Field

In 1980, there were 2,326 undergraduate students and 10 graduate students, and 3 Japanese students in the university.

The entire school currently has 1,298 faculty and staff members; among them 559 are full-time teachers. Among the teaching staff, there are 2 professors, 69 associate professors, 292 lecturers, 10 teachers, and 186 assistants.

In the past six years, it has retained a total of 13 foreign experts and 6 foreign teachers in the aspect of language and literature to teach at the university at one time or another. There are still 6 people working at the school. Heilongjiang University has been serious about building up the teaching team. Since its inception, a plan to improve the teaching team was established. Files for teachers and evaluation records were established. The academic leaders in all the departments and the backbones in teaching were clearly assigned. Furthermore, research groups were set up and plans for improvements were proposed. In recent years, some teachers were selected to go to foreign higher learning institutions to study. Another batch of teachers were sent to long or short term study programs in key higher learning institutions or research organizations in the country. In the university, there are classes held for teachers who are away from production or away from production on a part-time basis, as well as for studying foreign languages.

Heilongjiang University presently has two research institutes in applied mathematics and Russian problems, as well as 5 research offices in sensitive semiconductor devices, theoretical chemistry, water soluble high polymers, environmental chemistry, and population economics. In the past two years, a number of scientific research papers have been published and some results have been obtained. The directionary editing office also revised and edited a ((Russian-Chinese Dictionary)).

In the 1978 national scientific meeting, it was given 4 scientific project awards and two collaboration awards. In the 1979 meeting of important technical accomplishments sponsored by the provincial government of Heilongjiang, 3 projects received awards. In the development of computers by the mathematics department and the applied mathematics institute and the study on the transplantation and design of software, in the area of single blade function and general topology, as well as in the theoretical study and development of magnetic sensitized devices, carried out by the physics department, the university has obtained significant results.

/94

The school currently has 50 laboratories. It owns electronic instruments and equipment such as computers. The audiovisual classroom is equipped with video recording devices. In addition, it has language training rooms and listening rooms.

The publications include, ((The Realistic Journal)), ((Foreign Language Journal)), ((Journal of Heilongjiang University)), etc.

The school operates a chemical plant, a computer factory, a machine shop, a band saw plant, a printing shop, and a farm. It also has its own affiliated medical center, kindergarten, and evening college. The computer factory has the capability to produce stable power supplies, table top calculators, generalized L-1 electronic computers, and L-2 specialized electronic computers.

The library currently has over 650 thousand volumes of books, of which over 170 thousand volumes are foreign books and 80 thousand volumes are thread bound books. There are over 1,700 kinds of periodicals, of which 300 are foreign publications. Presently, it is building a four story library building which occupies 7,300 square meters of space.

Heilongjiang University occupies 600 acres of land. Currently, the school building space is over 98,000 square meters.

For 22 years since its inception, Heilongjiang University has developed 7,519 special people for our country. Among them, 121 were graduate students.

> Current President: Zou Baoxing. Secretary of Party Committee: Bai Ruai.

HARBIN POLYTECH UNIVERSITY

1-2-2-C-2C

erreres everyouts merecent leverants represent

School Address: Xidazhi Street, Nangang District, Harbin, Heilongjiang.

Harbin Polytech University is a multi-disciplinary technical university. It was born in 1920 in the important border town of Harbin.

When it was initially established, it was a technical school to train technical people for the Zhongdong Railroad. It had departments such as architecture, electrical engineering, and mechanical engineering. The program was five years and Russian was used in the classroom. In 1922, it was changed to Sino-Russia Polytech University. In 1928, the Law and Politics Institute and the Business Institute were consolidated into it to offically change its name to Harbin Polytech University. It was controlled by China and Russia jointly. In 1931, the teaching plan was again

changed to a four year system. It had departments such as electricity, mechanical engineering, technology, transportation, city government, and civil engineering. After the "September 18th" incident, Harbin Polytech University was taken over by the Japanese imperialists. In 1937, it set up departments such as civil engineering, architecture, electricity, mechanical engineering, applied chemistry, mining, and metallurgy. Japanese was used to teach in the classroom. In addition to accepting Chinese and Russian students, it also accepted Japanese students. After the Japanese imperialists surrendered in 1945, Harbin Polytech Institute was still controlled jointly by China and Russia. It had set up 7 departments in civil engineering and architecture, electrical engineering, engineering economics, mining, metallurgy, chemical engineering, aeronautical engineering, and eastern economics. It had 10 special fields. Since its inception until 1945, there were over 2,000 graduates. Many of them had international reputations in the technical and educational communities.

In the anti-Japanese struggle to save our country, Harbin Polytech University and its students and faculty members carried forward the honorable revolutionary tradition and made certain contributions.

After People's Republic of China was founded, Harbin Polytech University and China Changchun Railroad were officially transferred over to our government. Harbin Polytech University began overall reform and expansion work. Since then, the history of Harbin Polytech University entered a brand new page.

Lecture Hall Area of Harbin Polytech University.

1274

274

In 1952, all the higher institutions in the country were reorganized. The mining department and metallurgy department were transferred to Northeast Engineering Institute. The chemical engineering department and irrigation engineering department were transferred to Dalian Engineering Institute. The aeronautical engineering department was transferred to Beijing Aeronatical Institute. Special fields related to railroad bridges and tunnels, and railroad signals were transferred to Beijing and Beijing Railroad Institute was founded based on these special fields as well as the related departments and special fields from other institutions.

/95

In 1956, Harbin Polytech University had already developed into a technological university with 7 departments and 27 special fields specializing in civil engineering, mechanical engineering, electrical engineering, instrumentation, and management. In 1959, it added 5 departments in aeronautical engineering, automatic control, radio engineering, mathematical mechanics, and engineering physics. In the meantime, according to the needs of our country, it built Harbin Construction Engineering Institute based on the civil engineering department. Northeast Heavy Machinery Institute was founded on the basis of its steel rolling and forging special fields. The power plant, and power transmission and distribution special fields were transferred to Beijing and formed Beijing Electrical Power Institute together with the related departments and special fields transferred from other institutions. These institutions contributed significantly towards developing talents for the socialist construction. From 1956 to 1960, the school gradually set up a welding research institute (later became the independent First Machinery Ministry Harbin Welding Institute), and research offices in the areas of precision machining, chemical engineering, thermal engineering instrumentation, dynamic economics, welding, mechanization and automation, solid state physics, computer, electrical power equipment in Sanxia, agricultural modernization, automated electrical station, and electrical power system.

For over thirty years, regardless of whether it was in the national economical restoration period or the socialist construction period, the university always has an extraordinary record. It has received alot of attention in the nation. As early as the early

fifties, entrusted by the Ministry of Education, the university held many national educational meetings on machinery and electricity, as well as meetings on the cirricula of various courses. During the meetings, it introduced and extended its experience on the establishment of special fields, as well as the preparations of special field teaching plans and outlines of courses. This had a certain effect on promoting the reform of the old education system in the country. The university was the first to accept graduate students and teachers for advanced study in the country after the liberation. It had developed a large number of teachers and research personnel for other institutions and research units. Most of them have already become the backbones in their posts in teaching and research. Some of them are already leaders in science.

The teaching plan of Harbin Polytech University is very strict. It emphasizes developing scientific and technical people according to special fields. Sufficient attention has been given to teaching the practical aspect of things and to developing the ability of the students to perform technical work independently. The teachers have high demand on the students. Their attitude is very serious. The students work hard and enjoy studying. They specialize in self-education. Higher level students are always engaged in scientific research activities under the guidance of the teachers. Some of them are even working as engineers on a part-time basis. Therefore, they can quickly adapt to the scientific and technical work immediately after graduation with results. Therefore, they are widely welcome by research organizations, factories, and industries.

In the past thirty years, Harbin Polytech University has actively contributed to the socialist construction in our country. It has delivered close to twenty thousand high level technical personnel for the country. It has trained over 1,200 graduate students and advanced learning teachers, as well as over 1,300 part-time college students. The Students of Harbin Polytech University in yesteryears have already become the center strength in the industry, technology, and education fronts in our country. For example, Cai Qigong, who made new contributions to fracture mechanics; Song Jian, who is a new star in the scientific

community; and Huang Tongnian, whose new accomplishment in the detection of total error of gears was commended by the government; are contributing themselves to the socialist Four Modernization Constructions in our country.

During the ten year period of chaos, the school was seriously scarred and damaged. After the "Gang of Four" was crushed, the students and faculty of the whole university were overjoyed and encouraged. They worked jointly very hard to restore and reorganize the school. It again is marching in its proud strides. The teaching and research work of the university has made new development. In the past two years, it was in charge of editing over 50 nationally unified teaching materials. There have been over 400 technical papers read in national academic meetings. In the 1978 national scientific meeting, 28 projects received awards. The welding teaching and research office attended this meeting as an advanced entity.

Academic activities with other countries are also becoming more frequent. In recent years, approximately over 200 professors and scholars from 11 countries and regions came to visit and to give lectures at the university, including world famous scholars such as Yang Zhenning and Ren Zigong. In the meantime, Harbin Polytech University has sent 4 representing groups to visit the United States and Japan and to carry out academic exchanges. Through visiting and exchange, school to school relationships and long term cooperation agreements have been reached with the school of management of Harvard University, Purdue University, Tokyo Polytech University in Japan, and Qianye Polytech University in Japan. Upon the requests from international academic organizations, in the past two years it has sent 18 people on 11 occasions to attend annual international cademic meetings and to present papers. In addition, in the past two years, it has sent 42 teachers to study, work, and lecture in the United States, Japan, West Germany, England, and Italy to further strengthen international academic exchange activities. This greatly promoted the development of the teaching and research work.

Today, Harbin Polytech University has already developed into a multi-disciplinary industrial university with 8 departments,

and 1 fundamental division. Under them, there are 28 special fields and 8 teacher training classes in all disciplines. Mechanical Engineering Department Precision Machinery Design Special Field Machine Manufacturing Technology and Automation Special Field Machine Manufacturing Fundamentals Teacher Training Class Electrical Engineering Department Microelectronics Special Field Electrical Measurement Technique and Instrumentation Special Field Electrical Equipment Special Field Metallic Materials and Technology Department Metallic Materials and Heat Treatment Special Field Casting Special Field Forging Special Field Welding Special Field Precision Instrument Department Timing Instrument Special Field Precision Machinery and Instrument Special Field Precision Instrument Manufacturing Technology Special Field Applied Optics and Optical Engineering Special Field Industrial Automation Instrumentation Special Field Laser Technology Special Field Computer and Automatic Control Department Automatic Control Special Field Computer Science and Engineering (software) Special Field Computer System Engineering Special Field Semiconductor Device Special Field Computer Science and Engineering (software) Teacher Training Class Radio Electronic Engineering Department Communication System Engineering Special Field Information Engineering Special Field Radio Technology Special Field Radio Technology Teacher Training Class Power Machinery Department Thermal Energy Engineering Special Field Steam Turbine and Combustion Turbine Special Field /96 Hydraulic Technology Special Field

•

Management Engineering Department Management Engineering Special Field

Fundamental Division

Mathematics Teacher Training Class Mechanics Teacher Training Class Physics Teacher Training Class Chemistry Teacher Training Class

Teacher and Research Office in Marxism and Leninism

Natural Dialectics Teacher Training Class

In 1980, there were 3,526 undergraduate students in four year programs. In 1978, it resumed accepting graduate students. Currently, there are 103 graduate students. The programs are divided into two years and four years.

There are 4,071 faculty and staff members in total at the university. There are 61 teaching and research offices and 1,316 teachers. On the teaching staff, there are 19 professors, 216 associate professors, 726 lecturers, and 355 assistants and teachers. There are 46 laboratories and close to 100 senior engineers and engineers. The laboratories are equipped with electronic computers, scanning electron microscopes, three-coordinate surveying instruments, optical function trnasfer apparatus, and various spectrometers, as well as numerous home made non-standard test platforms to be used in teaching and research. In addition, color video recorder systems and audiovisual classrooms also provide favorable conditions for teaching and academic activities. The school library currently has collected approximately 600 thousand volumes of books. The number of periodicals reaches over 1,800 (of which foreign periodicals reach over 1,200 kinds) to provide a good condition for the faculty and students in reading, studying, and opening up academic activities. The school also runs a machine factory and an electronic instrument plant. In addition to fulfilling the duties of teaching practices and developing part of the instruments and eqiupment used in research and teaching, they also carry out production work.

The entire school occupies about 900 acres of land. The school building space is close to 300 thousand square meters. The school also has good athletic facilities such as a gymnasium and a swimming pool to provide the faculty, staff, and students of the university

the basic condition to strengthen their bodies. Secretary of Party Committee: Li Rui (part-time)

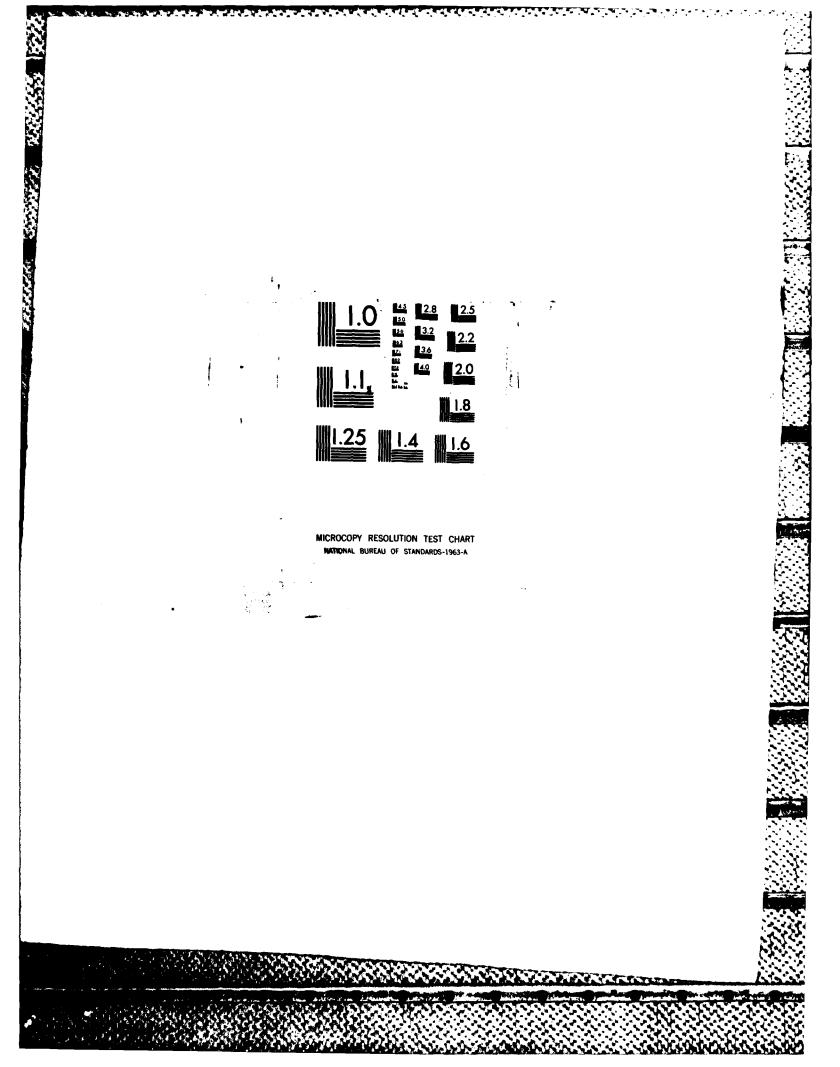
HARBIN SCIENCE AND TECHNOLOGY UNIVERSITY School Address: Xuefu Road, Harbin, Heilongjiang

Harbin Science and Technology University is a technical higher learning institution which is still developing. Its predecessor was Heilongjiang Engineering Institute.

Heilongjiang Engineering Institute was founded in 1958. It was built on the foundation of 3 middle level special schools including Harbin Civil Engineering and Construction Engineering School, Harbin Machine Manufacturing School, and Harbin Construction Engineering School. It is a multi-disciplinary technical high learning institution. The first president was Chen Lai who was the vice governor (current governor) of the Province of Heilongjiang.

At the beginning, when Heilongjiang Engineering Institute was first founded, the rate of development was relatively fast. Back then, it had 4 departments in mechanical manufacturing, metallurgy, civil engineering and construction, and geology. Under these departments, there were 11 special fields in mechanical manufacturing technology and equipment, metallographic heat treatment, casting technology and its equipment, metal ore mining, metal ore concentration, iron and steel smelting, metal pressure processing, geological survey and mine searching, mineral geology and survey, hydrological geology and engineering geology, industrial and civilian building construction. In 1959, Harbin City Engineering Institute was merged into Heilongjiang Engineering Institute. In the same year, it added a radio electronic engineering department (later changed to department of electrical engineering). In 1960, there were 5 departments, 16 special fields, over 400 teachers, and over 1,600 students in school. In the same year, the provincial committee of the Chinese Communist Party in Heilongjiang decided to establish Heilongjiang Science and Technology University. It recruited 300 people in the same year and the school was located in Heilongjiang Engineering

| AD-A137 587 BRIEF INTRODUCTION TO HIGHER EDUCATION INSTITUTIONS IN 4/9<br>CHINA(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH<br>12 JAN 84 FTD-ID(RS)T-1082-83 |  |               |     |        |   |      |           |   |    |            |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---------------|-----|--------|---|------|-----------|---|----|------------|--|
| UNCLASSIFIED                                                                                                                                                       |  |               |     |        |   |      | F/G 5/9 N |   | NL |            |  |
|                                                                                                                                                                    |  |               |     |        |   |      |           |   |    |            |  |
|                                                                                                                                                                    |  | ť             |     | Nor-St |   |      |           |   |    |            |  |
| N74                                                                                                                                                                |  | <b>L</b> init |     |        |   |      |           | Ţ |    |            |  |
| 9 <b>.</b> 7                                                                                                                                                       |  | . Lu          |     | , MJ ~ |   | PSR. |           |   |    | - <b>1</b> |  |
| ×1                                                                                                                                                                 |  |               |     |        | 4 |      |           |   |    |            |  |
| al)##w                                                                                                                                                             |  |               |     |        |   |      |           |   |    | 6-17       |  |
|                                                                                                                                                                    |  |               | ji. |        |   |      |           | - |    |            |  |
|                                                                                                                                                                    |  |               |     |        |   |      |           |   |    |            |  |



Institute, which was called the Second Division (it was later terminated). Since 1961, the number of departments and special fields was reduced. The department of metallurgy, geology, and radio electronic engineerng gradually stopped accepting students and then were eventually abolished. In 1966, the entire school only had 3 departments and 3 special fields left: i.e. mechanical manufacturing technology and equipment special field in the department of mechanical engineering, the industrial and civilian building construction special field in the department of civil engineering and construction, and the casting special field in the department of casting.

Up to that point, Heilongjiang Engineering Institute had already trained over 1,400 college graduates for the country. They were distributed to the engineering and mining industries and units all over the country.

During the ten year period of chaos, the school was seriously damaged. It stopped recruiting for as long as seven years. In 1971, Heilongjiang Engineering Institute was merged into Harbin Polytech University (the civil engineering and construction department was merged into Harbin Construction Engineering Institute). In 1973, the two schools were separated again. Heilongjiang Engineering Institute was moved back to its original site and resumed recruiting. In 1974, it added two departments in chemical engineering machinery and industrial electrification and automation. Due to the two moves, the equipment, furniture, instruments, and books were lost and damaged to a serious extent.

In April of 1978, with the approval of the State Council, Heilongjaing Engineering Institute was changed to Harbin Science and Technology University. It was placed under the leadership of both the Chinese Academy of Sciences and the Province of Heilongjiang. The Chinese Academy of Sciences was the principal party. In November of 1980, with the approval of the State Council, it was placed under the jurisdiction of the National Instrument Bureau.

Based on the needs of the Four Modernization Constructions of our country, it has been determined that Harbin Science and Technology University, as a major objective, should be training the badly needed special people in instrumentation and measuring

Call and the second second

technology. Special fields were added. A number of teachers and cadres were transferred into the university. The school entered an expansion and development stage.

It currently has 5 departments and 9 special fields. The program is four years.

First Mechanical Engineering Department

Precision Instrument Special Field

Precision Mechanical Manufacturing Technology Special Field Second Mechanical Engineering Department

/97

 $\cdot \mathbf{N}$ 

Casting Special Field

Metallic Materials and Heat Treatment Special Field Electrical Technology and Automatic Control Department

Electronic Technology Special Field

Automatic Control Special Field

Electronic Computer Department

Electronic Computer Special Field

Technological Physics Department

**Technological Physics Special Field (Science is primary. Science is combined with engineering.)** 

Geology Department

Geology Special Field

It is currently planning the establishment of a technical management special field.

In 1980, there were 1,052 undergraduate students and 44 graduate students.

Since 1978, a Japanese spoken language training was held to train people who were going abroad. The people to be trained include technical personnel and teachers in research institutions and universities belonging to the Academy of Science. It has been held 3 times and trained 110 people.

Since it was placed under the jurisdiction of Chinese Academy of Sciences in 1978, a number of experienced technical personnel, and engineering technological people were transferred into Harbin Science and Technology University from all over the place to strengthen the teaching team. The school currently has 1,027 teachers and students. There are 430 full-time teachers. Among the teaching staff, there are 2 professors, 12 associate professors, and 212 lecturers. In order to improve the academic standard of

the teachers, over 80 teachers were sent to study in related universities and research organizations in and out of the country. Among these teachers, 5 of them went to study and visit in the the United States, Yugoslavia, Romania, and Japan. In addition, two American language teachers have been retained to be dedicated to improving the teacher's ability as well as to assist part of the students in English.

Under the condition that the teaching load is relatively heavy, Harbin Science and Technology University has been actively involved in research work. Moreover, it has already obtained results. The study of the geology of the five largest connecting ponds in the Province of Heilongjiang conducted by Professor Wang Chengqi in the department of geology was given an award in the national scientific meeting. The study of the theory and application of the Orlichi space and the study of the ((Row Tightness of Space B(S) and L(G))) carried out by Professor Wang Tingfuin the mathematics department, received some attention in the mathematics community. The research results of Associate Professor Ren Shanzhi in the casting special field in spherical black cast iron, and anti-erosion platinum white iron, and sand erosion mechanism received a third class award in the Academy of Sciences system in 1979. Furthermore, he went to Japan in early 1980 to carry out academic exchange activities in Kyoto University and Early Rice Field University. The research result of laser hologram of jet phenomenon studied by the laser teaching and research group in the physics teaching and research office had been presented in the 1979 national optics annual meeting. Furthermore, it was invited to the International Optics Symposium held in Beijing in 1980. Since the national scientific meeting in 1977, there have 13 projects awarded by the Chinese Academy of Sciences and the Province of Heilongjang.

Currently, it publishes ((Journal of Harbin Science and Technology University)) (natural science), as well as ((Collection of Translated Articles at Harbin Science and Technology University)) which is not printed regularly, to exchange technical information.

The library currently has a collection of 160 thousand volumes, of which 25,000 volumes are foreign books. There are over 1,900 periodicals, of which more than 800 are foreign periodicals.

Currently, there are 15 laboratories. It owns equipment and instruments such as computers, mass spectrometers, high speed movie camera, large and small tool type microscopes, film coating machine, high and low frequency melting and heating furnace, etc. for teaching and resarrh purposes.

The school also has a machine shop. It has 112 workers. In addition to ensuring serving the needs for teaching and research, it also produces gear oil pumps and optical seats.

The entire school occupies 336 acres of land. The school building area is over 67,000 square meters, of which 14,300 square meters are for teaching use. Currently, the multiclass lecture hall, physics laboratory building, and dependent dormitory are under construction. Furthermore, more lecture halls will continue to be built.

> Current President: Wang Daheng Secretary of Party Committee: Lu Shunqing

## NORTHEAST HEAVY MACHINERY INSTITUTE

School Address: Fulaerji, Qiqihaer, Heilongjaing

Northeast Heavy Machinery Institute was the first industrial college founded after the country was established to train high level engineering technical personnel for the heavy machinery industry. It was under the dual leadership of the province of Heilongjiang and the First Mechanical Industry Ministry. The principal was the First Mechanical Industry Ministry. Its predecessor was the branch campus of Harbin Polytech University.

/98

In 1958; according to the arrangement of the national economic construction and the need in educational development, part of the faculty, staff, and students, as well as instruments and equipment in the heavy machinery department steel rolling and forging special fields at Harbin Polytech University were moved to Fulaerji to establish the Branch Campus of Harbin Polytech University. In October of 1960, it was officially separated from Harbin Polytech University to become an independent school. The name was determined to be Northeast Heavy Machinery Institute in 1961. The irrigation machinery and petroleum mining machinery special fields of Lanzhou Petroleum Institute were merged into the institute. Until 1965, these 3 special fields were again reorganized to Lanzhou Ganshu Polytech University.

For over twenty years since its inception, the school has always maintained and carried forward the excellent school atmosphere of Harbin Polytech University which is realistic, rigorous, and hard working. The special fields in the school continue to increase. The faculty team is growing. The quality of people training and scientific research continues to improve. It has made certain contributions to the socialist construction for our country.

In the aspect of special field construction and development, it has developed from 6 special fields during the initial period of the school to 12 special fields. Up until the present moment, it has already formed a multi-disciplinary industrial college centered around the design and manufacture of complete sets of heavy machinery on a preliminary basis. Science, engineering, and management are combined together.

Currently, there are 3 departments, 1 fundamental division, and 12 special fields.

Smelting Machinery Department

and the second

a stand a series

and the second of the second

Steel Rolling Machinery Special Field Smelting Equipment Special Field Hydraulic Transmission and Control Special Field Machine Management Engineering Special Field

Mechanical Manufacturing Department

Mechanical Manufacturing Technology and Equipment Special Field

/99

Forging Technology and Equipment Special Field Metal and Heat Treatment Special Field

Metallic Materials Special Field

Automatic Control Department

Industrial Electric Automation Special Field Radio Technology Special Field

**Electronic Computer and Its Applications Special Field Detection Techniques Special Field** 

In 1980, there were 1,975 four year undergraduate students, 49 graduate students, and 69 advanced study students in school.

There are 1,237 faculty and staff members. There are 407 full-time teaching staff members, of which 31 are associate professors, 197 lecturers, 42 teachers, and 137 assistants. In recent years, it has hired 4 American experts and professors at one time or another. Since the institute was founded, it has developed 12 classes of undergraduate students and 1 class of graduate students. The total number is 3,746. Many of them have already become the backbone strength in heavy machinery, smelting design, and research and teaching in our country.

After long periods of training and practice, the teaching team, in addition to being knowledgeable, has abundant skills in design, testing, adjusting, calculating, and processing. In the aspect of teaching, it carried out the style of emphasizing the effectiveness of teaching. It concentrates on the training of fundamental theories and basic skills. The teaching method involves asking questions and offering answers. The quality of teaching is steadily improving.

Since the institute was founded, it has already completed over 240 projects in scientific research, of which 32 items are national research projects. In the 1978 national technical meeting, two projects received awards. After the technical meeting, a number of research accomplishments were obtained. Two items were praised by the First Mechanical Industry Ministry and 11 projects were given awards by the province of Heilongjiang. The young Associate Professor Lian Jiachuang's study of the automatic control theory of plates has already reached international level. The paper was recommended to be read in the 1980 steel rolling international meeting and was collected in the symposium. The new technology of the residual stress of reinforced protective rings in symmetric deformation and the theoretical study on the spatial model and dimension type of a hinged four rod structure have major breakthroughs. It has already preliminarily formed a research team with certain characteristics. For example, encouraging accomplishments have been obtained in the simulated

286

test study of continuous tube rolling machines in the area of steel rolling automation, the distortion theory of a steel plate rolling machine, the study of strength parameters and plate automatic control, the large electric power station forged part technology in the aspect of forging technology and equipment, the multi-directional die technology, the study of the structure and strength of large die forged water compressors, the study of the trajectory, dynamics, and kinetics of the connecting rod mechanism in the aspect of mechanical engineering, the study of cam processing, and the study of wave guide transmission.

The institute is located in an industrial base. It is next to the First Heavy Machinery Factory and the Qiqihaer Steel Mill. The school and the plants work very closely. The students, in conjunction with real production, opened nearly one hundred scientific research projects in production practice.

In combination with the teaching need, it edits and publishes ((Teaching Study)) and ((Journal of Northeast Heavy Machinery Institute)). It also participated in the writing, translation, and editing of 29 national teaching materials and over a dozen technical books.

The library currently collects 250 thousand books and over 500 periodicals, of which 55,000 volumes are foreign. Currently, it is building a library building with various student reading rooms and special teacher's reading rooms.

Currently, there are 18 laboratories which own electronic computers, x-ray machines, various electronic strainometers, optical ballistic machines, medium and high frequency heating furnaces and other experimental equipment for teaching and scientific research use. In addition, there are complete sets of video recorders and special audiovisual classrooms.

The affiliated machine shop, electronics shop, and steel rolling plant are equipped with various production equipment. They became the bases for teaching, practice, and scientific research. Furthermore, they undertake the tasks of processing and developing of teaching and research equipment.

In addition, it has its own affiliated farm, printing shop, dependent middle and elementary school, kindergarten, and medical center.

The school occupies 805 acres of land. Currently, it has 78,500 square meters in building space.

.

School Anniversary Date: June 5th. Current President: Peng Tao. Secretary of Party Committee: Li Zhichao.

## HARBIN SHIP ENGINEERING INSTITUTE

School Address: Wenmiao Street, Harbin, Heilongjiang.

Harbin Ship Engineering Institute was founded on September 1, 1953. It is a higher engineering institute for training research and design personnel in the ship building industry and ocean engineering.

During the initial stage when the school was first founded there were 5 special fields in ship design, ship power, ship electrical work, etc. After rapid development of over a dozen years, in 1964, it had 24 special fields including ship design, ship power, ship electrical work, communications and guidance, hydroacoustical technology, electronic technology, and computer. These special fields were complementary to each other. The standard of the faculty continued to strengthen. The laboratory construction work was developing steadily. The quality of teaching was improving each year.

Before 1966, Harbin Ship Engineering Institute trained over 3,000 graduates. They were distributed in related higher learning institutions, research design departments, and shipyards. Most of the graduates have already become the backbone strength of these units in teaching, research and production. They have made certain contributions to the research, design, and manufacturing of hydrofoils, hovercrafts, generalized electronic computers, specialized electronic computers, and other specialty ships in our country.

During the ten year period of chaos, the school was damaged. In September of 1970, through reorganization and reconstruction, some of the old special fields were maintained. After the "Gang of Four" was crushed, it was further strengthened and improved. Furthermore, according to the needs of the development of the ship building industry and ocean engineering, some new special fields and general special fields were established. Currently, there are

288

8 departments and 13 special fields.

Ship Engineering Department

Ship Engineering Special Field

Flight Vehicle Engineering Department

Flight Vehicle Design and Manufacturing Special Field Flight Vehicle Engine Special Field

Flight Vehicle Automatic Control Special Field

Flight Vehicle Control and Guidance Special Field Shipboard Power Engineering Department

Shipboard Nuclear Power Device Special Field

Shipboard Internal Combustion Engine Special Field Automatic Control Department

Automatic Control Special Field Hydroacoustic Engineering Department

Hydroacoustic Engineering Special Field Computer Science and Technology Department

Computer Science and Technology Special Field Mechanical Engineering Department

Mechanical Manufacturing and Equipment Special Field

Metallic Materials and Thermal Treatment Special Field Electronic Engineering Department

Electronic Engineering Special Field

In 1980, there were 2,248 undergraduate students and 8 graduate students in school. There were 2,261 faculty and staff members, of which 835 are teachers and 223 are ancillary teaching personnel. In the faculty team, there were 6 professors, 78 associate professors, 491 lecturers, 226 assistants, 34 teachers, 2 senior engineers, 54 engineers, 59 technicians, and 67 experimentalists. When recruiting was resumed in 1972, the studying program was three years. Since 1977, it has been changed to four years. Now, there have been 1,461 graduates.

The ship engineering institute is particularly concerned about building up the faculty team, especially in the development and improvement of new strength. In the faculty team, middle aged and young teachers are the majority. They are young and strong. Over the period of time, they stay at the front line of research and teaching and undertake a large amount of theoretical studies and actual practices. They represent the backbone strength with

289

**creative spirits, and a serious attitude in study and teaching. They are quite welcome by the students.** 

and the standard standard and the standard standard standard standard standard standard standard standard stand

It currently has 44 laboratories, including fundamental laboratories for physics, chemistry, mechanics, electrical work, electronic circuit, automatic control element and principle and special field laboratories for ship model pond, structural mechanics, and electronic computer. In these laboratories, there is a ship model testing pond, a TQ-16 general purpose electronic computer, a H68/TR microprocessor, shipboard stream turbine power devices, a hydroacoustic test pool, a circulating water channel, and an electrical work instrument center. This equipment and instruments are very important in teaching and research. The institute has been working hard to promote the modernization of teaching techniques. Currently, it has already built a set of black and white and a color closed circuit television system. There are 5 audiovisual classrooms to be used by 700 students simultaneously. There is 1 foreign language listening room. These have some effects on improving the teaching method and raising the quality of teaching.

In ten years, it has actively been engaged in research activities and obtained a number of valuable research accomplishments. Among these results, the hydroacoustic point measuring system was successfully developed under the leadership of Professor Yang Shies who is the chairman of the hydroacoustic engineering department and a famous hydroacoustic engineering expert in our country, by the department of hydroacoustic engineering, the department of computer science and technology, Haijian Machinery Factory, and other related organizations. The shipboard row reduction fin developed by the automatic control department is on an advanced level in our country after tests on the sea. The specialized electronic computer miniaturization project undertaken by the department of computer science and technology was found to be reliable. In addition, important accomplishments have been obtained in projects such as the inertial guidance system, overall design and equipment development of deep sea submarines, and Zinc-Air fuel cells. In addition to these key national research projects, the quartz clock and digital clesel ...gine test instruments developed by young teachers are .. iso at a leading level in the country.

290

In recent years, the studies of theoretical topics have obtained some results at international or national level. Six papers were sent to international academic exchange meetings, in which the paper ((Calculation of the Theory of the Air Worthiness in Five Degrees of Freedom)), written by Professors Gu Yixiong and Dai Yishan had attracted a lot of attention from the experts of various countries in the fourteenth annual meeting of the Pond Society of the International Ship Engineering Society. In the fifteenth international meeting on the Theory and Applications of Mechanics, the paper ((Plastic Field at the Tip of a Crack)), written by Associate Professor Gao Yucheng was presented and included in the minutes of the meeting. In the 1978 national scientific meeting, six research projects, including the ((Calculation of the Theory of Air Worthiness in Five Degrees of Freedom)) received awards.

In May of 1978, an academic committee was established as an inquiry organization on the entire institute in academic affairs. Under the leadership of the academic committee, it is publishing three journals, i.e. ((Journal of Ship Engineering)), ((Science and Technology in Ship Engineering)), and ((Selected Translations in Special Topics in Ship Engineering)).

Harbin Ship Engineering Institute has always been concerned with domestic and international academic exchange. Up until this moment, it has already selected and sent 27 teachers to visit and attend academic meetings abroad and 29 teachers to study in foreign countries. It also invited several scholars from Japan, the United States, Italy, West Germany, and Sweden to carry out academic exchange or to lecture. Furthermore, 4 educational representative groups have arrived to visit. In 1979, the institute sent a teaching representative's group to Japan to investigate the teaching situations in 12 universities. In the same year, it became a friendly school with Nagasaki Comprehensive Scientific University in Japan. At the end of 1980, a group of representatives was again sent to England and West Germany to investigate education. Furthermore, it established a school to school cooperation agreement with Hamburg Ship Building Institute in West Germany. This not only promoted the friendship between our people and other people in the world, but also had a long lasting effect on the construction of the institute.

Harbin Ship Engineering Institute has relatively good teaching and living conditions. The campus occupies 795 acres of land. The farm occupies 230 acres. The present school building space is more than 210 thousand square meters, of which over 80 thousand square meters are classrooms, laboratories, research, and library. The gymnasium is close to 9 thousand square meters. The lecture hall reflects the style of our nationality which is tall and beautiful. Each advanced study class has its own guidance room. The student dormitory is wide and bright. The gymnasium consists of a competition hall, a practice hall, a ping-pong hall, a gymnastic hall, a weight room, and an indoor swimming pool. The affiliated hospital has 105 medical personnel and 100 beds.

The library currently has nearly 170 thousand books and 2,000 Chinese and foreign periodicals. Books, data, and periodicals combine to over 70 thousand volumes. In the near future, it plans to continue building a library building, and a large staircase type classroom equipped with various modern teaching equipment.

In addition, there is a machine shop, a printing shop, an affiliated power plant, a kindergarten, and a gas station to serve the needs in research, teaching, and everyday living for all the employees in the institute.

> School Anniversary Date: September 1. Current President: Feng Jie. Secretary of Party Committee: Zhuo Ming.

DA QING PETROLEUM INSTITUTE School Address: An Da County, Heilongjiang.

The preceessor Da Qing Petroleum Institute was Northeast Petroleum Institute, which was founded in 1960. During the initial period when the institute was first founded, it had 4 departments in exploration, exploitation, refining, and machinery and 6 special fields. The school system was five years.

After the entire country was liberated, with continuing development of the petroleum industry, there was an urgent need to train a large amount of special people in the petroleum industry. In 1960, at the same time as "Da Qing Oil Field" was exploited, Northeast Petroleum Institute was under planning. In addition to including the original Heilongjiang Petroleum Institute, units such /101

as Beijing Petroleum Institute, Da Qing Oil Field, etc. assisted by sending part of the faculty members and engineering technical personnel. On September 7, 1961, the school was officially opened. Until 1965, there were 1,450 students and 572 faculty and staff members in school.

During the ten year period of chaos, Northeast Petroleum Institute suffered serious damages. The construction was stopped and it did not accept any students in 5 years. In 1971, recruitment was resumed. The program was changed to three years. In 1975, Northeast Petroleum Institute was changed to Da Qing Petroleum Institute.

After the "Gang of Four" was crushed, Da Qing Petroleum Institute proceeded with restoration and reorganization. Due to the concern and support of related departments, in recent years, there have been some new developments.

It currently has 4 departments and 1 fundamental course office. There are a total of 18 special fields. The undergraduate program is four years. The special training course program is two years.

Petroleum Exploration Department

Petroleum Geological Exploration Special Field Petroleum Geophysics Exploration Special Field Petroleum Field Geophysics Special Field

Petroleum Exploitation Department

Petroleum Drilling Engineering Special Field Petroleum Development Engineering Special Field Oil Field Exploitation Special Field

Petroleum Machinery Department

Petroleum Field Machinery Special Field Refining and Chemical Engineering Machinery Special Field Mechanical Manufacturing Technology and Equipment Special Field Mechanics Special Field (Teaching Training)

Petroleum Refining Department

Petroleum Chemical Engineering Special Field Basic Organic Chemical Engineering Special Field Oil Refining Engineering Special Field Chemistry Special Field (Teacher Training) Fundamental Courses Office

Petroleum Production and Processing Procedure Automation Special Field Mathematics Special Field (Teacher Training) Physics Special Field (Teacher Training) English Special Field (Teacher Training) (Special Training Program - two year program)

In 1980, there were 2,025 undergraduate students in school. Since 1978, it began to accept graduate students. Currently, there are 23 graduate students in school.

The entire institute has 1,522 faculty and staff members, of which 430 are teachers. On the teaching staff, there are 3 professors, 17 associate professors, 159 lecturers, 36 teachers, and 215 assistants.

Da Qing Petroleum Institute has already established 7 research institutes in high pressure oil driving mechanism, chemical reaction engineering, formation and movement of petroleum, fracture mechanics, and instrument automation. In recent years, it has undertaken 61 research projects assigned by the Ministry of Petroleum and Da Qing. Among them, 17 projects have already obtained results. Mathematics professor Zhen Muli has been teaching for decades with lots of experience. In recent years, he has been responsible for the calculation and design tasks for projects such as the "scraping plate flow meters" and so on, which are urgently needed for counting petroleum. He has contributed greatly to the measurement of the output of petroleum. In the 1978 national scientific meeting, he was given a citation. Chemical Engineering Professor Wang Zongxiang was engaged in the research work on the light oil thermal decomposition in the field. He has already obtained a general mathematical model and was awarded in the Scientific Meeting in the Province of Heilongjiang. Currently, each laboratory and research group is working hard to develop research work on petroleum geochemistry, oil reserve seepage mechanics, oil level physical chemistry, chemical engineering, and fracture mechanics.

Da Qing Petroleum Institutes currently has 39 laboratories, of which 5 are center laboratories. The instruments and equipment in the laboratories have been replenished. It has already

all interactions of

established an electronic computer station, a physics laboratory building, and an audio visual teaching building. Currently, the main laboratory building and the chemistry laboratory building are under construction. They will be completed soon for use.

Relatively large developments have been made in the construction of the modernization of teaching techniques. It owns color video recording equipment for teaching. The drafting course in the machinery department uses a day light projector controlled platform designed by the institute itself and a number of electrical teaching tools. In recent years, it has added over a thousand pieces of instruments and equipment. Some advanced teaching techniques have already been used in the teaching process.

/102

The library currently has 310 thousand books and 1,049 kinds of periodicals.

It publishes the ((Journal of Da Qing Petroleum Institute)).

Da Qing Petroleum Institute occupies 1,000 acres of land. Currently, there are over 110 thousand square meters of building space.

In the twenty years since its inception, Da Qing Petroleum Institute has trained 3,565 undergraduates. It has trained over 3,500 engineering technical personnel and workers.

> Current President: Tao Jingming. Secretary of Party Committee: Liu Jiwen.

Job No. 1082-83 (Part VII)

City of Shanghai Fudan University School Address: Handan Road, Shanghai

المعادية والمعادية والمتحدية والمعادية والمعادية والمعادية والمعادية والمعادية والمعادية والمعادية والمعادية وا

/103

The predecessor of Fudan University was Fudan Public School, which was founded in 1905 by patriotic teachers and students led by Ma Xiangbo after they dissociated themselves from Zhendan Institute due to their opposition to the cultural monopoly of the imperialists.

In 1917, Fudan Public School was reorganized to become the Private Fudan University, which had 3 disciplines in literature, science, and business, as well as a preparatory class and a middle school division. In the fall of 1927, it had 4 schools in literature; in 1929 - science, law, and business with a total of 15 departments. Until 1935, the number of students had reached over 1400. Before the war against the Japanese broke out, the school had 3,171 graduates, including many famous persons such as Shao Lizi, Jin Wenzhu, Zhang Zhirang, Tong Dizhou, Xia Zhengnong, Chen Shixiang, Feng Tepei, Jin Guobao, Xu Yifang, etc.

After the anti-Japanese war erupted, Private Fudan University was moved to the inland area from one place to another. Its funding ran out. The nationalist government reorganized it to a national university in January 1942. From 1938 until Shanghai was liberated, the university had 5 schools in literature, science, law, business and agriculture. There were a total of 26 departments and special courses. The entire school had over 4,000 faculty and students. From its inception until the eve of our liberation, the school had a total of 7,245 graduates.

In the famous "May 4th" movement, progressive students at Fudan University participated in the establishment of the "Shanghai Student Union." They went on strike and proceeded to march on the streets. After the Chinese Communist Party was formed, ome progressive faculty and students were actively involved in the "May 30th" movement, the three armed revolutions of the workers in Shanghai, the "December 8th" war against Japan in Songhu, and the "December 9th" student campaign to save our country, etc. During the anti-Japanese war period, the Party led progressive faculty and students to struggle against the anti-communist surrendering policy of the Nationalist Party. There were many progressive professors, such as Chen Wangdao who was the first person to translate the ((Declaration of the Communist Party)) into Chinese; Zhang Zhirang who was the dean of law school; Lao She, Cao Yu, Hong Shen, Tian Han, Hu Feng, and Jin Yi who were writers; Zhou Gucheng who was a historian; and Lu Yudao who was a biologist. These people had a very large influence on the society and the vast number of progressive teachers and students. In the three years after the school was moved back to Shanghai in 1946, the progressive faculty and student strength was used in a series of struggles to oppose American Soldier's savage act, against hunger, against civil war, to protect human rights, to survive, and to protect the university under the leadership of the Party. In coordination with the successful attack of the Liberation Army, they struck the enemy with strength and won the liberation of Shanghai.

On June 24, 1949, the Military Control Committee of the Chinese People's Liberation Army took over Fudan University.

After the reorganization of the schools and departments of all the higher learning institutions in the country in 1952, Fudan University was allowed to maintain 9 departments in Chinese language and literature, foreign language and literature, history, news, economics, mathematics, chemistry and biology. There were 339 faculty members, of which 137 were professors and associate professors, 60 were lecturers, and 142 were assistants. There were 1,667 students. In 1955, the university reinstated the law department. In 1956, it added the philosophy department. In 1958, it established the nuclear science department, which had two special fields in nuclear physics and radiation chemistry. In the meantime, a number of new special fields were set up in other related departments, such as radio physics, electronic physics, mechanics, computation mathematics, macromolecular chemistry, biochemistry, etc. In 1960, the international politics department was established and the law department was abolished.

After 17 years of hard work since our liberation, Fudan University had become a key modern comprehensive university in arts and sciences. However, the ten year period of chaos brought along with it serious destruction to the school. It was forced not to accept any students for as long as 4 years. After the "Gang of Four" was crushed, especially after the Third Central Committee of the Party's Eleventh Congress, the school was then given a new lease on life.



The Campus of Fudan University

Fudan University currently has a team of faculty members of /104 over 300 people who are well recognized for their knowledge. Many of them are internationally known experts and scholars.

For example:

Professor Su Buging, president of the university and concurrently director of the Mathematics Research Institute, specializes in differential geometry and computational geometry. He has conducted in-depth research into such fields as projection curves, projection surfaces, projection conjugate net theory, and general spatial differential geometry and has published over 150 papers and one monograph and is world renowned. University Vice-President, Professor Xie Xite, who is presently director of the Physics Research Institute is renowned Chinese female physicist. She has long been engaged in basic education and scientific research in semiconductor physics. She presently also directs research work in surface physics while obtaining positive results in the field of both theoretical experimental research. With other comrades she has co-authored a number of monographs and has published more than 10 major papers.

University Vice-President Tan Jiazhen is a renowned Chinese genetic biologist.

University Vice-President Cai Zuguan is a renowned expert in electro-optic sources who was promoted from the workers.

Professor Guo Shaoyu of the Chinese Language Department has long been engaged in teaching and research work in the history of Chinese literature and criticism and from 1919 to the present he has published several books and was in charge of editing a number of important teaching materials.

Professor Tan Qixiang is the chairman of the history department as well as the chief of the historical geology research office. He has led a number of assistants in the study and plotting of the ((Collection of Historical Maps in China)) which covered the periods from the primitive society to the Qing Dynasty. They have plotted over 300 maps which reflected the changes of our boundaries in various dynasties and the variations of major rivers. Under the guidance and development of elder experts, a number of middle aged disciplinary leaders have already emerged at the university. There are approximately 30 such people, and their ages are around 40-50 years old. They have certain achievements academically and continue to obtain new results. Their work has attracted some attention in the international academic society and generates a relatively significant effect. For example:

Professor Zhang Peiheng in the Chinese department specializes in the study of classical literature. Especially, he has studied the literature in the Ming and Qing Dynasties in depth and published over 10 papers. Recently, he published ((Hongshen Chronicle)) which was very creative. In 1979, he was invited to lecture at Kobe University in Japan. His work received many good comments.

Professor Gu Chaohao is the chairman of the mathematics department as well as the vice-chief of the mathematics institute. His specialities are differential geometry, partial differential equations, and mathematical physics. He has published a total of over 80 papers. In 1979, he went on the road to lecture in United States, West Germany, and France as a visiting professor for a year and returned with honor.

Professor Xia Daoxing is the vice-chief of the mathematics institute. He specializes in generalized function analysis and operator spectrum theory. In 1956, he provided positive answers to two hypothetical questions presented by a certain famous Russian expert in function theory. His paper ((Theory on the measurement and integration in an infinite dimensional space)) was translated and published in 1972. In the past two years, he has visited the United States and Japan to give lectures. He was praised by his colleagues.

Professor Hua Zhongyi is the chairman of the physics department and the vice-chief of the modern physics institute. He is an influencing expert in vacuum physics and technology.

He has developed and invented many vacuum pumps, analytical equipment, vacuum materials and instruments and published 1 book. In recent years, in international academic meetings, he has presented some academic reports which attracted some attention.

Professor Yang Jiafu is the chairman of the nuclear science department and the vice-chief of the modern physics institute. He has obtained certain accomplishments in low energy experimental nuclear physics and in the area of combining it with borderline disciplines such as surface physics. Among other things, his study on the bound foil spectrum filled a blank for our country. He has published over 30 academic papers.

At the same time as Fudan University is improving the quality of teaching, it is actively involved in expanding its research work. In recent years, it has obtained 155 research results, of which 46 items are major. In the 108 key projects in scientific research in our country, the school participated in parts of the research in 18 items. In the national scientific meeting in 1978, the university received awards for 40 projects. In the 1979 Shanghai City Scientific Meeting, it received 31 awards. For **example:** the catalyst for the derivatization of toluene has reached the same level as the same type of catalyst T-81 abroad. In the production of formaldehyde by the electrolytic silver F-29 method, all the major indicators have all reached advanced levels for the same type of products abroad. The study of second defect control and impurity absorption effect has reached an advanced level in our country. The university and related organizations collaborated in the development of the first large scale automatic distributing photometer in the country. The quality indicators have reached advanced international standards. The breeding of the new rapeseed "135", which grows fast, resists diseases, produces with stability and in large quantities, has reached a relatively good level in our country. It has been expanded in large areas of land in Baoshan County in Shanghai. The major accomplishments in the social science area included ((China Historical Maps Collection)) (8 volumes in total) which was the first set of maps reflecting the changes of our borders in the

past dynasties in our country and the ((New English-Jhinese Dictionary)) which is the latest English dictionary in our country; and most of the editing committee members are Fudan faculty members.

Since the liberation, Fudan University usually holds a scientific presentation and discussion meeting every year on the school anniversary date on May 27th. With the exception that during the ten year period of chaos it was forced to be interrupted for 12 years, it has been held 14 times. It has become a tradition to check out the theoretical research results performed by the faculty and students. In addition, some teachers also present several hundred papers in publications outside the school as well as in the university journal (divided into social science and natural science editions). Some of them have already published special topic books. For example, the mathematics department and the mathematics institute completed over 150 papers in the past four years, of which approximately 50 papers have been published in famous scientific magazines in and out of the country. Over 20 subjects have been reported in international academic discussion meetings. Approximately 60 people have lectured in foreign universities. About 150 people have made presentations in national academic meetings. Books such as ((Five Lectures in Differential Geometry)), ((Computational Geometry)), ((Theory of Linear Operator Spectrum)), etc. have been published. In the social sciences area, the more outstanding theoretical research accomplishments included the comments on Chinese literature, basic theory of literature, political economics, etc.

In the past four years, Fudan University has made strengthening the build-up of teaching materials as an important link in improving the quality of teaching and in developing new teachers. According to the statistics taken in September 1980, the university was in charge of editing 41 kinds of teaching materials (24 in arts and 17 in sciences) which were published in the Ministry of Education. The university itself edited and published 25 kinds of teaching materials and 204 kinds of lecture notes. In the long time practice of teaching and research, Fudan University has gradually developed the advantages of a modern key point comprehensive university. These advantages are:

(1) Arts and Sciences are combined together. The disciplines are relatively complete. This is not only favorable for strengthening the building of fundamental disciplines but also for developing new disciplines. In recent years, the school established the computer science department and management science department.

(2) The faculty team is relatively strong and the strength in teaching and research is comparatively powerful. In many disciplines, the university not only has a number of internationally famous experts and scholars with specialities but also has a number of internationally influencing young leaders in their disciplines who have been developed and promoted by the older generation.

(3) The school atmosphere is more realistic with an exploratory spirit. Many accomplishments and contributions in scientific research were obtained after 20-30 years of continuous hard work. In some cases, main streams with specific characteristics were created.

(4) The equipment and conditions are relatively better. It has a number of engineering personnel and high level technicians who are at a certaintheoretical level as well as capable of mastering high technology. They are able to use their own hands to improve many pieces of equipment used in teaching and research. Furthermore, they allow the results of research work at the /105 university to be reflected in teaching very rapidly.

In addition, due to the fact that the university is located in the largest industrial base in our country - Shanghai, it is favorable for the university to correlate theories with realities. It is also favorable for the school to study new subjects and to expand research results. In addition, it is convenient for the university to open up international academic exchange activities with famous universities and research organizations in other countries. Fudan University has 15 departments and 41 special fields. Chinese Language and Literature Department Chinese Literature Special Field Chinese Language Special Field History Department History Special Field Historical Geology Special Field News Department News Special Field International Politics Department Political Science Special Field International Politics Special Field Political Economics Department Political Economics Special Field Population Science Special Field World Economics Department World Economics Special Field Law Department (under preparation) Law Special Field Philosophy Department Philosophy Special Field Foreign Language and Literature Department English Language and Literature Special Field Japanese Language and Literature Special Field French Language and Literature Special Field German Language and Literature Special Field Mathematics Department Mathematics Special Field Mechanics Special Field Computational Mathematics Special Field Applied Mathematics Special Field Physics Department Physics Special Field Semiconductor Physics and Device Special Field Radio Electronics Special Field Chemistry Department Chemistry Special Field Physical Chemistry Special Field **Biology** Department Zoology Special Field Botany Special Field Plant Physiology Special Field Animal Phsiology Special Field Microorganism Special Field Biochemistry Special Field **Biophysics Special Field** Anthropology Special Field Genetics Special Field Nuclear Science Department Nuclear Physics Special Field Radiation Chemistry Special Field Computer Science Department Computer Software Special Field Computer System Structure Special Field

1.2.2.2.2.2.

ないないないであり

53)

Management Science Department Management Science Special Field Industrial Economics Special Field

AUG 200

In addition, it established an evening college to accept commuting students in 1980 which has 7 special fields in Chinese Literature, English, Japanese, News, Environmental Monitoring, Mechanics, and Computer Software.

Since 1977, the undergraduate program has been changed to four years. As for the number of years to study in the evening college, with the exception of a three year program for the two special fields in news and environmental monitoring, the other special fields require four years. Fudan University began to adopt the credit unit system from the new incoming undergraduate students in 1980. Each department also accepts two and three year graduate students. The requirements in the development of students at Fudan University are that: they must have awareness to socialism, solid foundations, wide range of knowledge, and active thoughts. In addition, they must have the capabilities to do actual work as well as high cultural and athletic accomplishments.

In 1980, Fudan University had 5,313 undergraduate students, 382 graduate students, 134 special students, and 61 foreign students. The entire school currently has 4,256 faculty and staff members, of which 2,184 are teachers. Among the teaching staff, there are 69 professors, 77 associate professors, 1,272 lecturers, 495 assistants, and 271 unspecified personnel. In addition, there are 817 full time research personnel.

In the past three years, the university has already sent 66 teachers and 24 graduate students abroad to study (generally for two years). It also sent 6 teachers to get involved in teaching or research work. In addition, 23 teachers were sent abroad for short term studies abroad (within one year). Furthermore, it has established school to school level relations with some universities in other countries. In the past three years, the university has invited 67 internationally famous foreign experts and scholars to lecture on campus. Furthermore, it has retained 10 foreign Ph.D. degree holders as honorary professors.

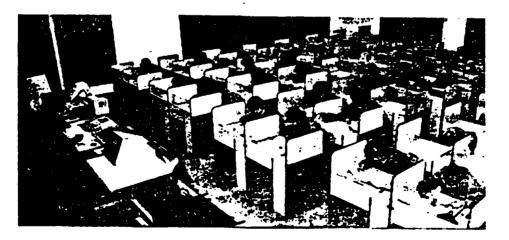
.

The independent scientific research organizations presently set up at Fudan University include: 7 institutes in mathematics, modern physics, lighting source, genetics, world economics, Chinese language and literature, and Chinese historical geology, as well as 11 research offices in the areas of Chinese dictionary, foreign literature, modern English, news, Latin America, Chinese ideology and culture history, Japanese history, Western Europe, socialist politics, population theory, and modern capitalist philosophy history.

The library of the university currently has a collection of 1.77 million books, of which 1.07 million are regularly bound Chinese books, 300 thousand are ancient thread bound books, 110 thousand are Russian books, 30 thousand are eastern language books, and 240 thousand are western language (English, French, German) books. In addition, there are 180 thousand volumes of bound newspapers and magazines as well as 140 thousand volumes of bound periodicals.

The entire university has a toal of 57 laboratories among the various science departments. The useful area is 27,000 square meters. Among them, the laboratories of surface physics, laser physics, middle level physics, general physics, mode identification, semiconductor physics, light source and optics testing, accelerator, catalysis, and physical chemistry have reached certain levels.

/106



Students of the foreign language department at Fudan University in session in the foreign language audio classroom. Presently, Fudan University publishes the bimonthly ((Journal of Fudan)) (Social science edition), the quarterly ((Journal of Fudan)) (natural science edition). ((Modern English Research)) which is not a periodical and ((Mathematics Annually)) (Fudan University Mathematics Research Institute was entrusted by the Ministry of Education to be in charge of the editing work). The four publications mentioned above are distributed both in and out of the country.

Fudan University has already established the "Fudan University Publishing Company." In addition, it also has an electronic instrument plant, a computer plant, a machine shop, an integrated circuit testing room, a chemical testing room, an electric lighting source testing room, a comprehensive garage, and a printing shop.

Fudan University occupies 896 acres of land. The building area is 250 thousand square meters.

With the present conditions, Fudan University has already built the foundation for the school to become the center for teaching and scientific research.

Since the liberation, Fudan University has already developed 22,396 college graduates, 667 graduate students, and 374 foreign students.

Fudan University is currently under the jurisdiction of the Ministry of Education.

School Anniversary Date: May 27th Current President: Su Buqing Secretary of Party Committee: Sheng Hua

Tongji University

School Address: Siping Road, Shanghai

The predecessor of Tongji University was Tongji German Medical School, which was founded in 1907 by the Germans. When the school was first built, it had two disciplines in German and Medicine. There were only 3 German teachers and 33 students. In 1912, Tongji German Medical School added engineering courses and the name was changed to Tongji School of Medicine and Engineering. In 1917, it was taken over by the Government. The name as determined to be Tongji Medical and Engineering Special School. Ruan Jiefan was the principal. In 1927, it was officially named National Tongji University. Zhang Zhongsu was the president. In 1936, Tongji University had 3 schools in medicine, engineering and science. Futhermore, it had established affiliated mechanist school, advanced professional school, high school, Germany tutoring class, practice hospital, and practice factory.

a de la devine de la serie de la devine de la completa de la serie de la devine de la devine de la devine de l

During the beginning stage of the school, the teachers at Tongji University were mostly German scholars. Up until 1937, it still retained many German scholars to teach at the university. German was used in the classroom. It emphasized the combination of theories with realities. It was known for its completeness of equipment, and honest and sincere academic atmosphere. The engineering school had a practice factory, a chemical engineering material testing building, and a high pressure laboratory. The medical school had an affiliated hospital, an anatomy research hall, a physiology research hall, a pathology research hall, and a pharmaceutical research hall.

As early as the period during the Revolution of 1911, democratic revolutionary spirit existed inside Tongji University. Some of the revolutionary students put away their pens and picked up arms to join the activities against the imperialist system of the Qing Dynasty. In the "May 30th" tragedy in 1925, Tongji University student Yin Jingyi was killed and Chen Baocong was wounded. It opened a new chapter in the student campaign history of Tongji University. In 1926, a large number of students at the university walked to Guangzhou to join the Northern Expedition to fight against the warlords. In the several major campaigns which followed, the progressive students of Tongji University bravely stood in the front line of combat.

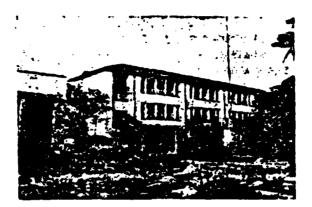
After the anti-Japanese war broke out in 1937, Tongji University was relocated to the inland area, from Shanghai to Zhejiang, to Jiangxi, Guangxi, Yunnan, and finally to Li Village in Shengxi County Siehuan in 1940. During its five years of stay in Li Village, Tongji University continued to develop despite the difficulties. It added the law school. The engineering school added the electrical engineering department and mechanical engineering special class. The school of science added the department of mathematics and department of physics. The German Tutoring class was changed to the Freshman College.

Tongji University has a tradition of rigorous attitude in studying. It is particularly concerned about the learning of fundamental theories. The engineering program required that students had to practice for one year, which was uniquely different from any other universities back then. The school of medicine had a good reputation in developing medical personnel in our country in the early stage. The mechanical engineering department, electrical engineering department, civil engineering department, surveying department, and ship construction department in the engineering school were established relatively early in this country. Over the decades, it has developed many engineering personnel.

In May 1946, Tongji University was moved back to Shanghai. The campus was scattered in five or six places. In the three year period from 1946 to the liberation of Shanghai in 1949, Tongji University decorated the campus, built new buildings, expanded the school of sciences to the school of arts and sciences, and added 3 departments in Chinese Literature, foreign language, and philosophy among all the confusion. In the meantime, under the leadership and influence of the Chinese Communist Party, the progressive faculty and students were actively engaged in struggles against imperialism, feudalism and bureaucratic capitalism. It became an important source of strength in the student movement in Shanghai. On January 29, 1948, the progressive faculty and students of Tongji University were involved in a revolutionary struggle at the engineering school (currently the site of Tongji University) against over twenty thousand nationalist soldiers and policemen which shocked the city of Shanghai. They won the support of all the universities in the city of Shanghai as well as in the country. The "January 29th"

/107

building in the university was named after this revolutionary struggle for democracy and freedom.



The "January 29th" Building in Tongji University, which has historical significance.

Before the liberation, Tongji University had 5 schools in science, engineering, medicine, literature, and law, as well as a Freshman College to study German for one year. There were two research institutes in geological survey and bacteria. Furthermore, it had an affiliated high school, an affiliated high school level professional school, an affiliated nursing school, an affiliated medical check-up clinic, and the affiliated Zhong-Mei Hospital. There were 236 faculty members, of which there were 86 professors, 22 associate professors and 23 lecturers. There were 263 staff members and 1,490 students.

In May, 1949, Shanghai was liberated. On June 25, the Military Control Committee of Shanghai sent military representative Yan Xiguang and vice-mayor Wei Que to take over the school. On August 1, the Tongji University School Affairs Committee was established. Xia Jianbai was the chairman. Professors Tang Zhe, Li Guohao, and Xue Teya were assigned the positions of the deans of the 3 schools of medicine, engineering, and science, respectively.

After the liberation, in order to suit the needs of large scale socialist economic constructions, Tongji University underwent many times of reorganization of the schools and departments. The multi-disciplinary university system was gradually changed. In 1949, the literature and law students of Tongji University were merged into Fudan University. In 1950, Tongji affiliated High School was changed to a city operated school. Its affiliated advanced professional school was placed under the jurisdiction of Eastern China Industrial Department. The medical school became independent and gradually began its move to the city of Wuhan. In 1951, the zoology and botany departments in the school of science were merged into Huodong Normal University. The civil engineering departments of Guanghua University and Daxia University, however, were merged into Tongji University in the same year. The electrical engineering department, mechanical engineering department, and ship building department in the school of engineering were transferred to Jiaotong University in 1952. The waterwork group in the civil engineering department was merged into the Huadong Water Power Institute. The faculty and equipment of the civil engineering and architecture departments (groups of 9 schools), including Jiaotong University, Datong University, Zijiang University, St. John's University, Zhenden University, Shanghai Industrial Special School, China Engineering and Business Special School, Huadong Transportation Special School, and Central Arts Institute Huadong campus, were transferred into Tongji University. This made Tongji University become the largest modern higher industrial institute in surveying, drafting. civil engineering, and architecture.

an de recentre de service de la d

After the reorganization of schools and departments, Tongji University carried out a series of reform works. In 1955, the university had 6 departments in survey, railroad, highway and bridges, sanitary engineering, structure, and construction, as well as 12 special fields in engineering survey, aerial photographic survey, astronomical geological survey, railroad construction, highways and city streets, highway bridges and tunnels, water supply and drainage, heat and gas supply and ventilation, industrial and civil building construction, architecture, city

construction and management. It established 34 teaching and research offices, 1 teaching group, 10 laboratories, and 1 practice plant. In addition, it had an affiliated high school in industrial and agricultural training using an accelerated method.

Since 1956, Tongji University has held a correspondence ctllege. It gradually established 4 special fields in industrial and civilian building construction, water supply and drainage, heat and gas supply and ventilation, and highway engineering. Furthermore, it also ran correspondence classes for single courses.

In November 1956, the leadership relationship of Tongji University was changed from the Higher Education Department to the dual jurisdiction of the City Planning Department and the Construction Engineering Department. In July 1958, it was placed under the jurisdiction of the Construction Engineering Department.

In 1956, most of the faculty and equipment of the department of survey at Tongji University was moved to Wuhan to be transferred into the newly founded Wuhan Survey and Drafting Institute. Up to that moment, Tongji University became a higher industrial learning institution in civil engineering and architecture.

In 1959, as Tongji University was developing civil engineering and architecture, it also added various departments in construction electrical machinery and equipment, mathematical physics, and engineering mechanics, at the same time. Special fields in sciences and electrical machinery were also established. In June 1960, Tongji University was listed as one of the 4 key higher learning institutions by the Department of Construction Engineering. In the same year, it was also listed as one of the 10 key technical institute by the Higher Education Department. In the meantime, the scientific research works at the university obtained relatively significant developments. Among them, the standard capacitance microphone received a second class award as a new industrial product of the nation in 1964. Projects such as the hydraulic digger residential building design for the factories and mines in the Sunan Region, Planning for the Hangzhou Overseas Chinese

Hotel and International Residential Area, and the design of the memorial for people's heros had received awards in design competitions in the Construction Engineering Department, in the country, and the world.

In January 1966, Tongji University was placed again under the jurisdiction of the Higher Education Department. It had 8 departments, and 23 special fields in sciences and engineering. The number of faculty and staff reached 2,200, of which 880 were full time faculty members. There were over 4,400 students in school.

During the ten year period of chaos, Tongji Univerisity was seriously damaged. Especially, an extremely left "May 7th" commune was established to disturb the normal teaching system. Until 1977, it began to accept current high school graduates to enter the university to study. After the Third Central Committee Meeting of the Eleventh Party Congress, through correction and reorganization, the school gradually restored its normal teaching order.

In 1978, Tongji University strengthened its ties with West Germany and reinstated German as the principal foreign language. In the meantime, the famous bridge and mechanics expert, Professor Li Guohao, was retained as the president of Tongji University. He has been working on the teaching and research of bridges and mechanics. After the liberation, for the first time he presented the work ((the theory on the bending of inclined heterogeneous plate and its application to inclined bridges)) which provided a theoretical basis for the analysis of inclined bridges with inclined structure characteristics. It was called "Li's Theory" by scholars in and out of the country.

Since 1979, Tongji University reinstated and added 12 special fields in sciences and engineering, and German. The university currently has 14 departments and 30 special fields. /108

> Mathematical Mechanics Department Applied Mathematics Special Field Sclid Mechanics Special Field

•••••

Physics Department Applied Physics Special Field Chemistry Department Applied Chemistry Special Field Architecture Department Architecture Special Field City Planning Special Field Landscaping Special Field Construction Engineering Department Construction Structure Engineering Special Field Offshore Petroleum Construction Engineering Special Field Road and Bridge Engineering Department Road Engineering Special Field Bridge Engineering Special Field Underground Engineering Department Underground Construction Engineering Special Field Surveying Special Field Engineering Geology Special Field Construction Materials Engineering Department Construction Materials Engineering Special Field Thermal Energy and Environmental Engineering Department Heating and Ventilation Special Field Urban Gas and Heat Supply Special Field Thermal Powered Machinery Special Field Water Supply and Drainage Special Field Environmental Engineering Special Field Engineering Special Field Mechanical Engineering Department Engineering Machinery Special Field Mechanical Manufacturing, Equipment, and Automation Special Field Electrical Engineering Department Industrial Automation Special Field Electronic Instrument and Measurement Special Field Computer Engineering Special Field Management Engineering Department Construction and Machinery Management Engineering Special Field Oceanic Geology Department Oceanic Geology Special Field Oceanic Geophysics Exploration Special Field Foreign Language Department German Special Field In 1977, the number of years to study for the undergraduate students was reinstated to four years. In order to restore the tradition to use German as the primary foreign language, starting from 1979, the new students entering part of the special fields are required to learn German for one year. The program becomes five years. After the correspondence college resumed accepting students, the number of years to complete the study is five. The graduate student programs are divided into four,

three, and two years.

In 1980, there were 5,229 undergraduate students, 267 graduate students, and over 1,000 correspondence college students in school. In addition, there were 45 foreign students. The entire school currently has 3,187 faculty and staff members, of which 1,528 are teachers. Among the faculty, there are 36 professors, 41 associate professors, 983 lecturers, 73 teachers, and 391 assistants.

Entrusted by the Ministry of Education, starting from 1979, Tongji University established a preparatory school for students going to Germany to study. Two preparatory classes have already been held.

Tongji University has been actively encouraging its faculty members to be creative and to undertake scientific research projects. It established 7 powerful research teams. Since 1977, the university has already completed 118 research projects, in which 86 items have already been applied and expanded in production in engineering and agriculture. A total of 64 projects among the research accomplishments already completed have received national scientific committee invention awards, Shanghai major research accomplishment awards, national scientific meeting awards, Shanghai Higher Education Bureau 30th Anniversary Tribute Awards, and Shanghai People's Government technical accomplishment awards.

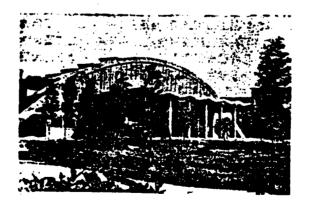
Tongji University currently has a structural theory research institute, road and transportation engineering research institute, oceanic geology research institute, and architecture design research institute, as well as 8 independent research laboratories such as Bohr solid state physics, applied acoustics, city planning and architecture, construction materials science, ventilation and air conditioning, environmental management, bridges, and electronic computers to undertake the research tasks of the nation and the city of Shanghai.

The university currently has 55 teaching and research offices, and 28 laboratories. It owns a number of large precision instruments and equipment. In addition, it has sets of color video recording and projecting equipment and special audio visual classrooms to be used for teaching and academic activities. The university library currently has a collection of 850 thousand volumes, of which 250 thousand volumes are foreign books. It presently subscribes to over 3,000 Chinese and foreign periodicals. The library has a total of over 1,200 seats.

The school edits and publishes ((Journal of Tongji University)) (Quarterly). It is distributed in and out of the country.

Tongji University runs a machine shop and a printing shop. The machine shop undertakes the tasks of student practice and development of part of the instruments and equipment used in teaching and research. It also produces Model H-15 air conditioners, C630 lathes, viscometers, tubular cutting tools, and piometers. The printing shop is responsible for the publishing of all teaching materials, journals and research information.

In recent years, Tongji University has strengthened its relation with West Germany. It hired West German experts to work and lecture at the university and received West German government representatives and academic groups during their visits to China. Several dozens of excellent teachers were sent to higher learning institutions and research organizations in West Germany to study and explore. In the meantime, the connection and cooperation between the university and other countries have also had developments.



The auditorium at Tongji University has 4,000 seats.

Tongji University occupies over 1,000 acres of land. There are over 220 thousand square meters of building area.

Since the liberation, Tongji University has trained over 24,000 high level specially developed people who have contributed significantly.

Tongji University is currently under the jurisdiction of the Ministry of Education.

School Anniversary Date: May 20th Current President: Li Guohao Secretary of Party Committee: Wang Ling

## Shanghai Jiaotong University

School Address: Huashon Road, Shanghai

Shanghai Jiaotong University was founded in 1896. The initial name of the school was Nanyang Public School.

Nanyang Public School was founded under the historical conditions of "abolishing imperial examination systems, building schools," and "working hard to learn from the west." During the early stage, based on the principle of "using the Chinese traditional learning as the body and the western learning in applications," it set up a teaching institute, an economics special discipline, a business class, a politics class, and a railroad class, as well as special classes in electrical engineering, ship administration, and piloting. Later on, Nanyang Public School was gradually shifted from liberal arts to the teaching and research in management courses and engineering technology. The school was concerned about the study of western advanced sciences and technologies. Foreign scholars and experts were retained to teach at the university. Relevant people were sent to Japan, England, and the United States to study. Furthermore, it set up a book translation institute to translate foreign books. It was at the end of the Qing Dynasty. There were domestic and foreign problems troubling the country. The circumstance was very difficult. On top of everything, there was a lack of experience in running a school. However, under the influence of Constitutional Reform and Modernization in 1898 and the progressive ideology of our countrymen to strengthen ourselves,

318

/109

the faculty and students of Nanyang Public School worked very hard to obtain good results. Many talents were developed. It became the highest learning institution in Southeastern China. It served as a pioneer, as well as a bridge, in the spreading of knowledge in modern sciences and culture. It had a promoting affect on the modernization movement back then.

After the Revolution of 1911, Nanyang Public School became Nanyang University. In 1921, it was changed to Jiaotong University, which had 3 campuses in Shanghai, Peiping and Tangshan. The one in Shanghai was called Jiaotong University Shanghai Campus. Jiaotong University Shanghai Campus was changed to Transportation Department Nanyang University in 1922. In 1928, it was again changed to Jiaotong University, and it was reunited with the branch campuses in Peiping and Tangshan. During the war against Japan, the school was relocated to the inland area. In 1939, it established a branch campus in Chongqing. In 1942, Jiaotong University Chongqing Branch became the main campus. In 1945, it was moved back to Shanghai. Since then, the school had made rapid development in establishing new disciplines. Until 1949, it had already established 3 schools of sciences, engineering, and management, 16 departments, 1 special class and 1 research institute.

After Shanghai was liberated in 1949, the history of Jiaotong University went to a new chapter. As a result of the reorganization of the schools and departments of all the higher learning institutions in the country in 1952, Jiaotong University was clearly designated as a "Multi-disciplinary comprehensive industrial university." The Government reorganized all the departments in the areas of mechanical engineering, electrical engineering, and ship construction from Tongji University, Datong University, Dalian Engineering Institute, and Shanghai Polytech Special School into Jiaotong University. In the meantime, all the departments of the school of science, all the departments of the school of management, and the aeronautical department, waterworks department, textile department, civil engineering department and chemical engineering department in the school of engineering were transferred from Jiaotong University to Fudan University, Tongji University, Huadong Normal University, Northern Jiaotong University, Huadong Aeronautical Institute, Huadong Textile Engineering Institute, and Huadong Chemical Engineering Institute. In order to support the socialist construction inland, in 1956 the State Council decided that Jiaotong University should be relocated to Xi An. Under the direct guidance and concern of Premier Chou, Jiaotong University was actively engaged in the relocation work. In 1957, based on the needs of Shanghai and Xi An as well as the actual situation, Jiaotong University was divided into Shanghai campus and Xi An campus after undergoing the proper reorganization. It was under unified leadership. In 1959, with the approval of the State Council, the two campuses of Jiaotong University became indepenent schools. The part in Shanghai was named Shanghai Jiaotong University and the part in Xi An was named Xi An Jiaotong University. In the 17 years prior to 1966, Shanghai Jiaotong University had developed significantly. Along with the needs of national construction and the development in modern science, the school replaced most of its departments and special fields. It set up 9 departments in automatic control, ship power, engineering physics, radio, ship building, electrical engineering, metallurgy, mechanical manufacturing, and locomotive, and a fundamental course teaching division. The number of students reached over 6,000 and there were over 1,200 faculty members (during the early stage after the liberation, there were more than 2,200 students and 290 faculty members).

During the ten year period of chaos, Shanghai Jiaotong University stopped its teaching work for 7 years.

After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Party Congress, the Party and the People's Government have been particularly concerned with Shanghai Jiaotong University. In order to strengthen the leadership of the university, the Chinese Central Political Bureau Member Wang Zhen was named as the chairman of

the school affairs committee on a part time basis. Minister of Sixth Mechanical Industry Ministry Chai Shufan and Secretary of Party Committee at Shanghai Jiaotong University Deng Xuchu were named as vice chairmen of the school affairs committee. The famous expert in mechanics, Professor Fan Xugi was nominated as the president. Furthermore, the leadership in the university was reorganized and strengthened. In the past three years, the various items of work proceeded smoothly at Shanghai Jiaotong University. It has already gotten on a healthy and developing track.

55. T



Chinese Communist Central Political Bureau Member, Chairman of Shanghai Jiaotong University School Affairs Committee Wang Zhen (center) arrives at the school for inspection.

As early as in the "May 4th" movement, the progressive /110 faculty and students at Jiaotong University marched in front of the demonstrating crowd raising the banner "fight for sovereignty on the outside, eliminate traitors on the inside." In the "May 30th" campaign, the students and faculty members of Jiaotong University were actively engaged in the action. Professor Hon Shaoqiu, who was a member of the Chinese Communist Party, was the commander in chief of the Shanghai student union. He led all the students in the city to join the anti-imperialism patriotic campaign and shook the world. When student Chen Yuqin was carrying out a patriotic campaign in the street, he was shot and killed by the British imperialists. During the ten year period of

civil war, eight years of war against Japan, and especially the three year period of liberation war, the progressive students and faculty members of Jiaotong University fought bravely. They marched on the front line of student movements. They were called the "democratic fortress" by the citizens of Shanghai and patriotic students. On the eve of the liberation, Jiaotong University had a total of more than 180 Communist Party members. Over 400 people had joined the New Democratic Youth Association. This was more than  $\frac{1}{2}$  of the total number of students at the time.

The Nationalist reactionaries and the imperialists were in mutually good terms. Over long periods of time, they carried out bloody oppression against the student movements at Jiaotong University. Many progressive students were arrested and jailed. In the Great Revolution Period, Hou Shaoqiu, Chen Yuqin, and Wu Hengci sacrificed their lives. On the eve of the liberation, Mu Hanxiang, Shi Xiaowen, etc. contributed their lives to the liberation career to the Chinese nation.

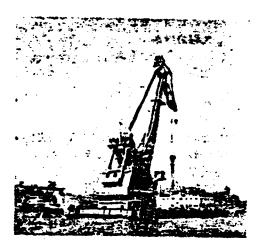
Jiaotong University has a good tradition in operating a university. It has always been promoting the spirit of "studying the reality, doing realistic work, and working hard and solid". In the previous school song there were sentences to remind the students that "Since you are awake, don't fall asleep again. Since you are clear in your mind now, don't be ignorant again. The spirits should always be raised to search for real knowledge with all your heart and all your strength. You should also work realistically with all your heart and all your strength." Over long period of time, the university has accumulated a lot of a experience in operating the school. It gradually formed the tradition that "the starting point is high, the foundation is thick, and the requirements are strict." It is particularly concerned about the quality of the incoming students. It only accepts the outstanding ones. It is also concerned with the teaching of fundamental principles. In teaching, it carries out the essence of "cutting the branches to leave a strong trunk." The number of lectures is limited to the essential ones while numerous practices are required. The purpose is to improve the

capability of the students in problem analysis and problem solving. The requirements imposed on students are rigorous. The training is strict. Such practice proved that this tradition reflected the objective pattern in teaching. The students developed according to this tradition are of relatively higher quality. Their grasp of the fundamental theories and basic skills is tighter. Their capability in problem analysis and problem solving is relatively better. The cross-section of knowledge is relatively wider. The "potential" is higher. They are able to adapt to the needs of developments in science and technology.

The tradition of Jiaotong University has new development under new circumstances. From 1978 to 1980, the scores of new students accepted by Shanghai Jiaotong University were on top of all the schools in the city of Shanghai. The university is among the front ones in all the higher learning institutions in the country. In order to recruit the best students, the university has maintained frequent contacts with some famous high schools. In order to strengthen the fundamentals, the university has gradually reinstated various departments in sciences and reorganized the special fields. Furthermore, it made the necessary arrangements to send experienced faculty members to the front line of teaching. The guidance with regard to laboratory courses has been strengthened. In the meantime, extra curricular activities for students have been widely opened up. In 1979, Shanghai Jiaotong University began to try out the credit system, the elective system, the guidance teacher system, and the class chairman system. Under the instruction of the guidance teachers, the students may elect to attend courses of various combinations according to their own interests and developing trends. Furthermore, they are allowed to elect a course across a special field, a department, or even the university. The university has already established a collaborative relationship with 4 universities including Huadong Normal University, Tongji University, Fudan University, and Shanghai First Medical College.

Jiaotong University cares about scientific research. In recent years, the scientific research work at the university has

developed significantly. Moreover, encouraging results have been obtained. For example, projects such as the new technology in longitudinal launching of a vessel without the use of support at the bow, the bearing lubricating principle and its design calculation method, the universal microcomputer, the navigational microcomputer, the information detection system, the electrolytic etching engraving technology, the computer controlled demonstration model mechanical area system, the basic theoretical study on fracture mechanics, the mathematical model for the angular velocity drift of a top, the experimental study of high power hydraulic couplers, and the cold extrusion technology, have provided major advanced technologies for the construction of the nation. As another example, the experiments and research work carried out by the ship hydrodynamics laboratory on the drag, propulsion, yaw, and control of ten thousand ton ocean freighters, oil tankers, fishing boats, and offshore drilling platforms have mostly been applied to actual ships. The economic value is enormous. In the 1978 National Scientific Meeting, Shanghai Jaiotong University received 33 major scientific research awards. In 1979, Shanghai Major Scientific Research Accomplishment Award Meeting, the school received 14 scientific accomplishment awards. In 1980, the National Science Committee approved the issuance of 2 invention awards to the university (semi-automatic underwater electric arc cutting method for deep water applications and composite cross-link type polymer binder for casting use). Currently, Shanghai Jiaotong University has 5 research institutes, including Ship and Ocean Engineering, Power Machinery Engineering, Electrical Work and Computer Science, Materials Science and Engineering, and Engineering Mechanics, as well as 29 research offices. Each year the university undertakes over 200 projects in scientific research.



**(** 

The floating crane designed by the Mechanical Engineering Department of Shanghai University.

Jiaotong University has always been particularly concerned about recruiting talents. It always likes to retain teachers with true knowledge. Cai Yuanpei, Zhang Yuanji, Tang Wenzhi, Ling Hongxun, Wu Yuxun, Ma Yinchu, Wang Bingnan, Zhong Zhaolin, Wu Baofeng, Cheng Xiaogang, Chen Shiyin, Zhou Ming, Qiu Weiyu, etc. have worked at Jiaotong University in leadership and teaching at one time or another. Currently, the university has 4,266 faculty and staff members, of which over 1,700 are faculty members. Among the teaching staff, there are over 300 professors and associate professors, more than 1,000 lecturers, and over 300 assistants and young teachers. The relatively famous professors include Zhu Wuhua, Zhou Zhihong, Fan Xuji, Yang Ya, Zhang Zhongjun, Luo Zudao, Cheng Shouzhu, Wang Gongheng, Zhang Xun, Li Bozhong, Xu Zuyao, Ruan Xueyu, Sheng Zhenbang, etc.

Shanghai Jiaotong University currently has 13 departments and 19 special fields. The undergraduate program is four years.

> Ship Engineering Department Ship Engineering Special Field Electronic Engineering Department Electronic Engineering Special Field Power Machinery Engineering Department Ship Propulsion Machinery Special Field Refrigeration Engineering Special Field Nuclear Power Engineering Special Field

Precision Instrument Department Precision Instrument Special Field Biomedical Instrument Special Field Electrical Work and Computer Science Department Electrical Power Engineering Special Field Automatic Control Special Field Computer Science Technology Special Field Industrial Management Engineering Department Industrial Management Engineering Special Field Materials Science and Engineering Department Materials Science and Engineering Department Thermal Processing Technology Special Field Applied Mathematics Department Applied Mathematics Special Field Mechanical Engineering Department Mechanical Engineering Special Field Engineering Mechanics Department Engineering Mechanics Special Field Applied Chemistry Department Applied Chemistry Special Field Technical Foreign Language Department Technical English Special Field

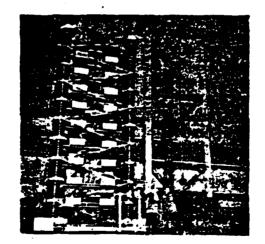
/111

In 1980, there were 4,906 undergraduate students, 437 graduate students, and more than 500 special class, evening college, and various short term class students in school.

In the 53 years from 1896 until the eve of our liberation in 1949, Jiaotong University had developed 5,044 college graduates and 36 graduate students. In the 31 years after the New China was founded, the total number of college undergraduate students actually graduated is 26,760. There have been 391 graduate students and 789 part time students graduated from the They have already become the backbone strength in university. industry, transportation, and technology in our country and have an important effect on the development of national construction. Furthermore, a number of famous scholars, scientists, politicians, and management experts have emerged, including Lu Dingyi, Qian Xuesen, Xia Yan, Wang Daohan, Zhao Zukang, Mao Yisheng, Zhou Jiannan, Sun Youyu, Sun Junren, Huang Xinbai, Zhu Wuhua, Zhang Guangdou, Gu Yuxi, Wang An, Ge Shouren, Chen Zhaoyuan, Tao Fen, Hou Shaoqiu, Chen Yuqin, Wu Hengci, Mu Hangxiang, Shi Xiaowen, etc.

In the past three years, Shanghai Jiaotong University has developed international academic exchange activities. On one

hand, it selected outstanding teachers and students to study and visit higher education institutions and research organizations abroad. They also participated in research work and attended academic meetings. On the other hand, it retained foreign scholars and experts to lecture and to guide scientific research at the university. The alumni of Jiaotong University are all over the world. They use all kinds of care and support to assist the construction and development of their school. In 1979, over 400 alumni and experts who were living in foreign countries visited the school and gave lectures. In addition, the university also retained a few dozen foreign experts as honorary professors, consulting professors, and honorary members of the school affairs committee. Furthermore, the university has established school to school relations with some famous universities in the United States and West Germany. In cooperation with Pennsylvania University in the United States, a dual degree graduate program in master of management and master of computer science was set up at Shanghai Jiaotong University. These activities created favorable conditions for the department of teaching and research work at the university.



The high voltage laboratory at Shanghai Jiaotong University

The school library has a collection of over 1 million volumes (including 240 thousand volumes of periodicals, magazines, and data). The school edits and publishes ((Journal of Shanghai Jiaotong University)) which is a quarterly, published in and out of the country.

Shanghai Jiaotong University currently has 59 laboratories. It owns 18,000 pieces of equipment, of which over 100 pieces are relatively precious equipment. In addition, there is a ship model laboratory, a cavitation cylinder experimental base, a language room, sets of color video recorders, and special audio-visual classrooms.

The school operates an affiliated factory, which undertakes the teaching practice of all the students and the development of the experimental instruments and equipment used in scientific research and teaching. Furthermore, it provides a number of products for the country. In addition, the university has an evening college, an affiliated high school, a department elementary school and a kindergarten.

Shanghai Jiaotong University presently occupies 633 acres of land. There are 260 thousand square meters of building space.

Shanghai Jiaotong University was rated as an advanced unit in the educational front in the city of Shanghai in 1977. In 1978, the relevant organization in the Central Government gave the title of "Educational Red Flag Unit" to the university.

Shanghai Jiaotong University is currently under the jurisdiction of the Sixth Mechanical Industry Ministry.

School Anniversary Date: April 8th Current President: Fan Xueji Secretary of Party Committee: Deng Xuchu

Shanghai Science and Technology University

School Address: South Gate, Jiading County, Shanghai Shanghai Science and Technology University was founded in 1958. It is a multi-disciplinary university combining science with technology. It is mainly for the purpose of developing scientific and technical personnel who are trained well morally,

/112

intellectually, and physically for the scientific research organizations and new technological industrial bases in the Shanghai area. In 1958, the school accepted 385 students. They were entrusted to the related higher learning institutions in Shanghai to give them the proper training (for two years). In 1959, the school was officially built. The campus was at the original Shanghai Finance Institute on Duyang Road. In 1960, it was moved to the South Gate in Jiaotong County.

During the initial stage after Shanghai Science and Technology University was founded, it had 10 departments in mechanics, technical physics, radio electronics, computation mathematics, chemical metallurgy and physical metallurgy, silicate chemistry and industry, elemental organic chemistry, biophysics and biochemistry, automation and atomic energy. There were 16 special fields in rocket shell, rocket engine, semiconductor physics, magnetism, radio electronic physics, radar structure, microwave measurement, computation mathematics, metal physical chemistry, metal physics, silicate chemistry and industry, elemental organic chemistry, biophysics and biochemistry, automatic control, radiation chemistry, and nuclear physics.

In 1960, Shanghai Science and Technology University set up a worker's class. It mainly accepted model laborers and advanced workers with high school standards. They were trained for three years so that they could acquire college levels (the worker's class was eliminated in 1969).



A view of the campus of Shanghai Science and Technology University

In 1964, entrusted by the national scientific committee, the school established a foreign language study division primarily to train technical cadres in foreign affairs. It set up 6 languages in English, French, German, Japanese, Spanish, and Arabic. It recruited the graduates from scientific and /113 technical universities to study for two years. The foreign language advanced study division was abolished in 1972. After the "Gang of Four" was crushed, it was rebuilt in 1978. Currently, it had 3 languages in English, French, and Japanese. There are 41 full time faculty members and 6 staff members.

The microwave special field of Huadong Normal University and the television and broadcasting special field of Shanghai Engineering Institute were merged into Shanghai Science and Technology University in 1972.

Since its inception, Shanghai Science and Technology University has been developing in the direction of combining science with engineering. In order to fully take advantage of the favorable condition of the industries and scientific research bases in Shanghai, the university insists on an operating method which involves the collaboration between the school and factories. It: retains well established scientists and technological experts from related research institutes and industrial departments to teach at the university on a part time basis. They lead the research work, develop graduate students, and arrange for senior students to practice and to do scientific research at those institutions. During the initial stage when the school was built, the Shanghai Institute of Chinese Academy of Sciences participated in the planning work. The school has a long and close relation with Chinese Academy of Sciences and the research organizations of the Fourth Mechanical Industry Ministry in Shanghai. After the "Gang of Four" was crushed, these traditions were restored.

Since the school was originally founded, Shanghai Science and Technology University has been paying special attention to the socialist direction of being both socialist-minded and professionally proficient in its teaching work. It is concerned

with the strengthening of the teaching and training of fundamental theories, basic knowledge, and basic skills. The students are trained to maintain a solemn attitude and a rigorous style. They work hard to improve their capability in analyzing and solving problems. For each course, especially fundamental courses, effective teachers with high teaching qualities are assigned. From 1979-1980, the various departments were taught by teachers who were above the lecturer level 83% to 93% of the time. Presently, 60% of the teachers undertake the duty of teaching fundamental courses.

Shanghai Science and Technology University is concerned with scientific research work. It has already obtained many encouraging results. The vice president of the university, Professor Huang Hongjia, has been working on the study of microwave theory for a long time. He has made unique contributions in the area of coupled wave theory. He has written two volumes of ((Microwave Principles)) with 1 million words and published over 40 papers. In recent years, he has been devoted to the study of guided wave optics to extend the coupled wave theory to the optical fiber wave guide. He has filled a void in the area of optical fiber research in our country. Professor Ding Weiyu, who is the vice chairman of the department of chemistry and materials science, has been working on the "Applications of the V and VI group organic compounds in organic synthesis" since 1963. He has already published 5 papers giving research results. His work in the areas of investigation of reaction mechanism, separation and analysis of the reaction products, and prediction and proof of the structures has reached an advanced level. Associate Professor of Mathematics Guo Benyu has been studying the theory of difference format since 1965. Since 1974, he has been devoted to the numerical solution of partial differential equations. He presented the generalized stability concept, established several discrete inequalities, and provided some new calculation formats. Furthermore, they have been applied to fluid dynamics. He has published over 20 technical papers and his accomplishment "Numerical Calculation of an Incompressible Viscous

Flow" received an outstanding accomplishment award in the National Scientific Meeting. The contribution of Associate Professor Zheng Quan in the mathematics department in the study of "The Method of Finding the Total Extreme Values and Its Applications" was given a second class major scientific research accomplishment award by the city of Shanghai in 1979. Associate Professor Wang Shentong in the department of precision mechanical engineering has obtained excellent results in his research work on the structural design and mechanical analysis of radars, radio telescopes, and satellite ground relay stations. Especially in the area of the optimization of the design of large scale antenna structures, he is particularly creative and his work is in a leading position in our country. In addition, research projects which have been successfully carried out by the university include, "the design, development, and finalizing of the Model 331A radar" and "the automatic observation apparatus of nuclear explosions using domestic microcomputers" (received an outstanding accomplishment award in the National Scientific Meeting). These projects also have relatively high standards.

Since its founding, Shanghai Science and Technology University has developed 3,356 undergraduate students, 554 people from the worker's class (college level), and 252 students in the foreign language advanced study division. From 1970 to 1976, it graduated 2,471 three year program students.

The school presently has 6 departments and 16 special fields.

Chemical and Materials Science Department Chemistry Special Field Semiconductor Physics and Chemistry Special Field New Inorganic Materials Special Field Physics Department Technological Physics Special Field Radio Electronics Department Microwave Theory and Technology Special Field Electronic Instrument and Measurement Technology Special Field Radio and Information Engineering Special Field Mathematics Department Computation Mathematics Special Field Applied Mathematics Special Field Precision Mechanical Engineering Department Precision Machine Special Field Precision Scientific Instrument Special Field Radio Equipment Structural Design Special Field Computer Science Department Electronic Computer Special Field Computer Software Special Field Automatic Control Special Field Biomedical Engineering Special Field (jointly operated with Shanghai Second Medical School)

In the above, with the exception that the biomedical engineering special field is a five year program, the programs for the other special fields are four years.

In 1980, there were 2,421 undergraduate students, and 50 graduate students in school. There were 1,726 faculty and staff members, of which 639 were teachers (not including 145 full time scientific research personnel). Among the teachers, there were 5 professors, 39 associate professors, 300 lecturers, 50 teachers, and 245 assistants. In addition, there were 34 part time people from the Chinese Academy of Sciences and other related research organizations in Shanghai working at the university as professors, associate professors, departmental chairmen, and departmental vice chairmen. There were 20 research personnel among them.

48, 94 AT - ALL TRACT HALLIAN OVER 

The radiation applications laboratory at Shanghai Science and Technology University

The scientific research organizations independently set up by Shanghai Science and Technology University include 8 units such as the Shanghai Electronic Physics Research Institute, radiation applications laboratory, bioengineering laboratory, semiconductor device physics laboratory, wave science laboratory, applied mathematics research office, modern analytical measuring technology laboratory, and audio visual education research office. The total number of full time research personnel is 145.

/114

The school publishes 3 publications: ((Journal of Shanghai Science and Technology University)) which is a semi-annual publication, ((Technical Information)) and ((Teaching Research)) which are published randomly.

The library has a collection of 340 thousand volumes, in which 110 thousand volumes are foreign books. In addition, there are 1,520 periodicals, in which 448 kinds are in Chinese and 1,032 are in foreign languages.

The school presently has 7 affiliated organizations: Shanghai Science and Technology University Branch Campus, Shanghai Science and Technology University Undergraduate Program Division, Shanghai Science and Technology University Foreign Language Study Evening College, as well as a school operated factory, printing shop and kindergarten.

The Shanghai Science and Technology University campus occupies 241 acres of land. There are more than 90 thousand square meters of building space.

Shanghai Science and Technology University is presently under the leadership of the People's Government of Shanghai. School Anniversary Date: May 19th Current President: Yang Shifa

Secretary of Party Committee

Huadong Chemical Engineering Institute

School Address: Meilony Road, Changhai

Huadong Chemical Engineering Institute was founded in 1952, which was the earliest chemical engineering institute established since the birth of New China. In 1952, when the schools and departments of all the higher learning institutions were reorganized, Huadong Chemical Engineering Institute was founded by merging the chemical engineering departments of 5 universities in the Huadong area, including Jiaotong University, Datong University, Dongwu University, Zhendan University and Jiangnan University, using the site of the school of sciences of Tongji University (Pingchang Street, Jiangwan, Shanghai) as the campus. In 1953, the chemical engineering department of Shandong Engineering Institute and the inorganic industry special field of Huanan Engineering Institute were merged into it.

In order to satisfy the need for chemical engineering personnel during the implementation of the first five year program, Huadong Chemical Engineering Institute rapidly planned and set up the inorganic industry department, organic industry department, and chemical machinery department. Under the department, the school established 5 special fields in silicate industries, inorganic industries, organic systhesis industries, fuel chemical industries, and chemical engineering machinery and equipment.

In 1954, Huadong Chemical Engineering was moved to the new site in the southwest suburb of Shanghai on Meilong Road.

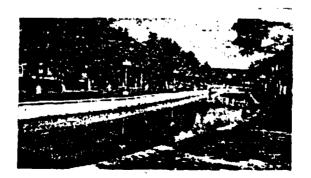
Since its inception until 1957, the teaching and research at Huadong Chemical Engineering Institute had developed steadily. It gradually added 4 special fields in chemical engineering, antitoxin, chemical pharmaceutics, and dye intermediates. The number of undergraduate students in school increased to 2,286. Furthermore, it began to accept graduate students in 1956.

From 1958 until 1965, through development and reorganization the faculty team and the standard of teaching and research of Huadong Chemical Engineering Institute had been improving year after year. In 1962, it was listed as a higher learning education under the direct jurisdiction of the Ministry of Education. Until the beginning of 1966, the entire institute had 1 fundamental division, 5 departments, 16 special fields, 34 teaching and research groups, 3 research offices, and 31 laboratories. The total number of faculty and students reached 6,270, in which

603 were full time faculty members (52 professors and associate professors, 105 lecturers, 8 teachers and 438 assistants). There were 4,300 undergraduate students, 56 graduate students, 54 foreign students and 1,059 staff and workers. It had become an engineering higher learning institution with a certain scale.

Huadong Chemical Engineering Institute has gathered many talented people in the areas of chemistry and chemical engineering from many other institutions. Among them, the famous professors include: our famous physical chemist Zhang Jiangshu, organic chemist Shao Jialing, chemical engineer Su Yuanfu, Gu Yuzhen, Wang Baojun, Liu Fuyiu, Ju Dingyi, Chen Weixin, etc. Huadong Chemical Engineering Institute accumulated the rich experience in operating schools by each institution. It gradually promoted and developed a good tradition of rigorous study and modest life style.

Huadong Chemical Engineering Institute is particularly concerned with the training in fundamental courses. The various teaching plans specified that the fundamental courses and basic technical courses must occupy more than 75% of the total studying time. Since 1955, the program at the institute was changed to five years. It is stressing the teaching of mathematics, physics, inorganic chemistry, organic chemistry, analytical chemistry, physical chemistry and chemical engineering principles. Experienced teachers have been organized to lecture and to compile teaching materials. Furthermore, laboratory courses are



One of the scenes on the campus of Huadong Chemical Engineering Institute. 336

established independently to strengthen the training of students in scientific research. The school style had been summarized in 1964 as "hard working in study, solemn and realistic, studying hard and having questions, lively and active". Under rigorous requirements and careful development, the graduates in each class have been welcomed by various hiring organizations.

Huadong Chemical Engineering Institute has paid a lot of attention to scientific research work. It fully takes advantage of its strength in chemistry and chemical engineering and stresses that scientific research must "complete the tasks, develop the discipline, and improve the quality of teaching". It is clearly determined that chemical engineering is the center of research. It established a chemical engineering research office and made "chemical engineering" as one of the key national items. At the end of the same year, being entrusted by the higher education ministry, Huadong Chemical Engineering Institute held the first national chemical engineering school discussion meeting in Shanghai. Significant accomplishments had been obtained in the area of theoretical study. The institute, on one hand built up a team, on the other hand constructed foundations in scientific research. In addition to the chemical engineering research office, it also gradually set up a lush dye research office and a plastic material research office, and obtained a number of research results. Among them, the infrared sensitized dye and special fiber glass steel received national product awards.

/115

Huadong Chemical Engineering Institute insists on its modest and realistic tradition. In basic construction and purchase of equipment, the emphasis is effectiveness. Administrative costs are cut to a bare minimum. Gradually, the good style of no unnecessary wastes is developed.

During the ten year period of chaos, Huadong Chemical Engineering Institute was seriously damaged. It stopped recruiting for as long as five years. The school suffered immeasurable losses.

In 1969 Huadong Chemical Engineering Institute was downgraded to be under the leadership of the city of Shanghai. In 1972, it was changed to Shanghai Chemical Engineering Institute. In 1978, through the approval of the State Council, Shanghai Chemical Engineering Institute was returned to the control of the Ministry of Education. Professor Chu Zhenghua was the vice president in charge of ordinary affairs. Professor Su Yuanfu was the vice president in charge of scientific research. In 1980, Shanghai Chemical Engineering Institute was changed back to its original name - Huadong Chemical Engineering Institute. Due to the encouragement by the spirit of the Third Central Committee Meeting of the Eleventh Party Congress, the school is rapidly restored and developing steadily through correction of mistakes and reorganization.

2223 1 (2222), 2000000, 2000000 1 (2222)

Huadong Chemical Engineering Institute has 9 departments and 21 special fields.

Mathematics and Science Department Applied Mathematics Special Field Chemical Physics Special Field Chemistry Department Chemistry Special Field Applied Chemistry Department Intermediates and Dye Special Field Chemical Pharmaceutics Special Field Light Sensitive Materials Special Field Biochemical Engineering Special Field Biochemistry Special Field First Chemical Engineering Department Chemical Engineering Special Field Inorganic Chemical Engineering Special Field Second Chemical Engineering Department Coal Chemical Engineering Special Field Petroleum Refining Engineering Special Field Basic Organic Chemical Engineering Special Field Material Engineering Department Polymer Chemical Engineering Special Field Composite Material Special Field Inorganic Material Science and Engineering Special Field Environmental Engineering Department Corrosion and Corrosion Protection Special Field Environmental Engineering Special Field Mechanical Engineering Department Chemical Engineering Machinery Special Field. Hydraulic Machine Special Field Automatic Control and Electronic Engineering Department Chemical Engineering Automation and Instrumentation Special Field In the above special fields, the number of years for the

undergraduate program is four years. In 1978, the various

disciplines in the institute resumed accepting graduate students. The studying periods are limited to two, three, and four years. In 1979, it began to try out the credit system. It has already offered and will offer 103 elective courses.

Huadong Chemical Engineering Institute had 4,527 students in school in 1980, of which there were 4,371 undergraduate students, 143 graduate students, and 13 foreign students.

It presently has 2,655 faculty and staff members, of which 1,065 are teachers. Among the teaching staff, there are 35 professors, 71 associate professors, and 672 lecturers.

111111111111

A STATEMENT I STRATEGY

The institute currently has a chemical engineering research institute, a three-waste treatment laboratory, a polymer material research laboratory, a catalyst research laboratory, and a light sensitive material research laboratory to undertake over 140 projects of research work for related organizations. In 1978. the institute had 32 research accomplishments to welcome the opening of the National Scientific Meeting. Among them, 10 items, such as the aerial film, deodorization of gasoline, comprehensive utilization of humic acid, water quality stabilizer, dewaxing using molecular sieve, and refining paraffin using molecular sieve received research accomplishment awards. In 1979, the institute obtained 10 major research accomplishments including ozone generation technology and equipment, unsaturated phithalate epoxy resin, cleaveable lithia mica microcrystal, etc., which received Shanghai Research Accomplishment Awards.

The entire institute presently has 38 laboratories and owns a number of advanced precision instruments and equipment such as electronic computers, a scanning electron microscope, a high pressure liquid chromatograph, spectrometers, an infrared spectrophotometer, an x-ray diffractometer, a thermal differential analyzer, and program controlled fatigue testing apparatus. They provide a good material foundation to research and teaching. The institute also owns a complete set of color video recorder equipment and a special audio visual classroom to serve the needs in teaching and academic activities.

The library currently has over 500 thousand volumes; in which over 160 thousand volumes are in foreign languages. There are over 4 thousand periodicals, in which 2,060 are Chinese periodicals.

The institute edits and publishes ((Journal of Huadong Chemical Engineering Institute)). It began in 1957. Currently, it is published quarterly and distributed in and out of the country.

Huadong Chemical Engineering Institute also has a machine factory and a chemical engineering plant. In addition to completing the tasks of teaching practice and process maintenance the two plants both produce some products such as glass fermentation jars, small amounts of mercury, chloroethanol rubber, and ion exchange resins.

Huadong Chemical Engineering Institute currently occupies 700 acres of land. There are more than 140 thousand square meters in building space.

In recent years, Huadong Chemical Engineering Institute has already sent over 40 faculty members and graduate students abroad to visit, to attend international academic meetings, and to carry out scientific research. In the meantime, 13 foreign experts were hired to teach at the institute. Through these academic exchanges and friendly activities, the teaching and research work of the entire institute was favorably promoted.

In order to improve the level of the teaching team and to renew the knowledge structure, Huadong Chemical Engineering Institute has developed a number of outstanding young and middle age backbone teachers through methods such as continuous selection, key point development and studying abroad and in related institutions. For example, Professor Chen Mingheng in the area of chemical engineering, and Associate Professor Hu Yin in the area of physical chemistry have already become the backbone in teaching and scientific research.

In the 28 years since its inception, Huadong Chemical Engineering Institute has already developed and delivered over 14,000 college graduates and graduate students. Most of them are working in various large chemical engineering bases and research design departments. The majority of them have already become the backbone strength on various lines and contributed their shares to the construction of our country.

Huadong Chemical Engineering Institute is currently under the jurisdiction of the Ministry of Education.

School Anniversary Date: October 25th Honorary President: Zhang Jiangshu Secretary of Party Committee: Pan Wensheng

Huadong Textile Engineering Institute

School Address: Yan An Xi Road, Shanghai

Huadong Textile Engineering Institute was founded in June 1951. It was formed by merging the engineering school of Private Shanghai Textile Engineering Institute, the textile department of Jiaotong University, and the textile class of Shanghai City International Special School. When the school was founded, it only had 3 departments in textile engineering, mechanical engineering, and dye engineering. The program was four years. In addition, there were 4 special classes (two year program) in cotton spinning, machine weaving, printing and dyeing, and textile machine manufacturing, as well as a high school level professional class (three year program). There were 687 students and 156 faculty and staff members, in which 32 were full time faculty members. Among the full time teachers, there were 7 professors, 5 associate professors, 3 lecturers, and 17 assistants. The campus was originally located at No. 1326 Yan An Xi Road. In 1952, it was moved to the present address. In 1952, when the schools and departments of high education institutions were reorganized, 6 textile institutes (departments and classes) in the Huadong, Zhongnan, and Xinan areas, such as in Sunan Industrial Special School, were transferred to the institute. Therefore, Huadong Textile Engineering Institute was founded and developed on the foundation of the textile departments and classes of 12 higher learning institutions.

/116

During the ten year period of chaos, Huadong Textile Engineering Institute was damaged. It stopped accepting students for four years. In April 1972, the name of the school was changed to Shanghai Textile Engineering Institute. After the "Gang of Four" was crushed, it restored its original name in July 1980.



A corner of the main lecture hall at Huadong Textile Engineering Institute.

According to the need of technical cadres by the textile industry, Huadong Textile Engineering Institute began to establish special fields in 1952. The earliest ones were 3 special fields in fiber material mechanical engineering (which was changed to textile engineering in 1958), fiber material chemical engineering (changed to dyeing engineering), and light industrial machine and equipment which was textile machine manufacturing. Later on, more and more special fields were gradually added. Until 1960, there were 4 departments in textile, textile machine, textile chemistry, and mathematics and science, as well as 14 technical special fields such as textile engineering (divided into 10 specialized areas in cotton, wool, silk, gunny, knitting, etc.), textile engineering economics, textile materials, textile machinery (divided into 2 specialized areas in design and manufacture), industrial power (divided into 2 specialized areas in electrification and heating and ventilation), textile production process automation, textile precision instrument manufacturing, chemical fiber, dyeing, chemical engineering, engineering mechanics, applied mathematics, applied physics, and industrial electronics. The number of students reached over 4,300.

Huadong Textile Engineering Institute resumed accepting undergraduate students in 1977. Since the Third Central Committee Meeting of the Eleventh Party Congress, the school corrected the wrongs, and reorganized and restored orders in teachings. Furthermore, it readjusted the original special fields and added some new special fields which were in urgent need. Presently, the school has 4 departments and 1 fundamental division, under which there are 13 special fields and 3 special classes. The program is four years with the exception that the special classes are either two or three years.

> Textile Engineering Department Textile Engineering Special Field Cotton Spinning Engineering Specialization Wool Spinning Engineering Specialization Machine Weaving Engineering Specialization Gunny Spinning Engineering Specialization Silk Spinning Engineering Specialization Knitting Engineering Special Field Textile Material Special Field Textile Industry Management Engineering Special Field Mechanical Engineering Department Textile Machine Special Field Machine Manufacturing Technology and Equipment Special Field Mechanical Engineering Special Class (commuting) Automation Department Industrial Electrical Automation Special Field Chemical Engineering Automation and Instrumentation Special Field Automation Special Class (commuting)

Textile Chemical Engineering Department Chemical Fiber Special Field Dyeing Engineering Special Field Environmental Treatment Chemical Engineering Special Field Applied Chemistry Special Field Chemical Engineering Special Class (commuting) Fundamental Division Applied Physics Special Field

In addition, the school operates 4 teacher training classes in mathematics, chemistry, fundamentals of machines, and thermal engineering instrumentation.

In 1980, there were 3,247 undergraduate and special class students and 25 foreign students in school.

In order to develop high level textile technical personnel, Huadong Textile Engineering Institute began to accept graduate students in 1959. Until 1966, it had trained over 100 graduate students. After stopping the practice for over ten years, it resumed accepting graduate students in 1978. The program is three years. There are 120 graduate students and 60 advisors.

/117

\_

Huadong Textile Engineering Institute is the largest textile industrial university in the nation which combines science with engineering and has a relatively complete collection of special fields. Currently, the institute has already formed a relatively strong backbone teaching team. Some of them are internationally well know experts, such as Professor Qin Baojin who is a chemical fiber expert. Over decades, he has been devoted to the education and research work in chemical fibers. The super gluce curtain thread studied by him has filled a void in our country. In 1973, he successfully designed and developed a ((fiber thermal and mechanical analyzer)) to study the relationbetween the chemical fiber technology and the structural characteristics. It was uniquely created in our country. He has published over 20 valuable papers in academic journals in and out of the country. As another example, Professor Yan Haojing is an expert in textile materials. He has been mainly engaged in the education and research work in textile materials. In 1953, he was the first to propose a method to study the structure of yarn, which has been adopted by the textile material textbooks in various countries. Professor Yan also established

the only textile material special field in our country. He has edited and wrote many textile technical books. Due to his aggressive work and prominent accomplishments, he has been rated as an advanced worker in Shanghai and in the country many times. In addition, the entire institute also has close to one hundred middle aged backbone teachers who are able to undertake the heavy load of teaching and research. The institute currently has 2,083 faculty and staff members, in which 862 are full time faculty members. Among the teaching staff, there are 25 professors, 33 associate professors, 3 senior engineers, 1 associate researcher, 442 lecturers, 63 teachers, and 295 assistants.

In order to train high quality technical people, in recent years, Huadong Textile Engineering Institute grasped the following key points in the teaching work: establishing rules in teaching, carrying out teaching research, and improving teaching quality, especially in raising the quality of the teaching of fundamental courses. It has obtained certain effects. Starting from the new students entering the institute in 1978, the relative proportion of elective courses has been increased. This created the condition for the transition to the credit system. The institute is in charge of and has participated in the editing and writing of 36 kinds of teaching materials for higher learning institutions. Currently, 29 kinds have already been completed on a preliminary basis.

Huadong Textile Engineering Institute had already established 3 research laboratories before 1966. It had close to one hundred full time research personnel and undertook the planning work for over 30 national research projects. It had completed a number of scientific research projects which filled the blanks in our country or exceeded advanced standards in the world. Currently, the institute has built a new chemical fiber research institute, a textile research institute, and an automation research laboratory, and restored the textile machine research office. There are over 140 full time research personnel in total to undertake several dozen of key research tasks for our country. In the past three years, the institute has completed 38 research projects by itself and in collaboration with others, which have been verified. Among them, 24 items were given awards by the city of Shanghai or by the nation. Twenty items have already been applied in production, such as the gas flow silk spinning, jet weaving machine, electronic computer monitoring system, etc. Projects such as clear ribbon composite silk spinning, heavy nitride photo-sensitive film, washing polyamide fiber composite silk, supersonicelectrical spark composite technology used in processing small holes have been creatively developed in our country for the first time. In order to strengthen the modern education and technical information work, the institute also built an audiovisual classroom and a technical information research office.

The library currently has 390 thousand foreign and Chinese books and over 2,300 periodicals. Presently, it is building a new 9,200 square meter library building which will be equipped with various reading rooms and teaching means to provide good conditions for teaching and research. The entire institute currently has 31 laboratories of all kinds. It owns many pieces of domestic and foreign made large equipment and instruments. In additions, there are sets of color video recording devices.

The institute is operating some affiliated factories in textile, machine, and chemical fibers to undertake the duty of student practice and part of the development work of research and experimental equipment. In addition, it has an affiliated part time high school for employees and a kindergarten.

The technical periodicals published by the institute include ((Journal of Huadong Textile Engineering Institute)) and ((Foreign Textile Technology)). ((Journal of Huadong Textile Engineering Institute)), a quarterly, was started in 1956. It is a textile technical academic publication distributed in and out of the country. ((Foreign Textile Technology)), a monthly, was started in 1973. It follows the policy of utilizing foreign know how in China. The emphasis is placed on introducing the research results of international textile technology and comprehensive reporting. It is provided as a reference to the textile production and research work in our country.

In recent years, Huadong Textile Engineering Institute has selected a number of faculty members and sent them abroad to study, visit, and participate in research activities at foreign higher education institutions and research organizations, as well as to attend international academic meetings. In the meantime, the representatives and scholars from some foreign universities, research institutions, and academic groups also arrived at the institute to visit and lecture. These activities have promoted the friendship and academic exchange between Chinese and foreign scholars.

Huadong Textile Engineering Institute is located in the west suburb of Shanghai. It occupies 306 acres of land. The present building space is over 100 thousand square meters. The lecture hall, new library, student dormitory and cafeteria which were under construction in 1980 have more than 30 thousand square meters of floor space.

The institute primarily develops teachers for textile schools and high level technical personnel for textile research organizations and in industrial construction. In the 29 years since its founding, the school has developed over 14,000 undergraduate students and more than 100 graduate students in total for our country, in addition to training close to one hundred foreign students for over 20 countries. The majority of them has already become the backbone in the construction of our textile industry. The famous model worker of the nation, Minister of Textile Industry Ministry, Hao Jianxi was a graduate of the school.

Huadong Textile Engineering Institute is presently one of the higher learning institutions under the jurisdiction of the Textile Industry Ministry.

School Anniversary Date: October 6th Current President: Qian Baojun Secretary of Party Committee: Xia Mingfang

Shanghai First Medical School

School Address: Medical School Road, Shanghai

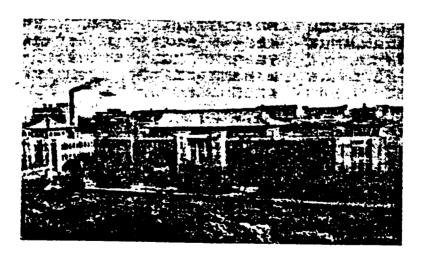
Shanghai First Medical School is a medical school with relatively complete disciplines. It was founded in 1927. The initial name of the institution was the Fourth Zhongshan University School of Medicine. The famous medical educator, Mr. Yan Fuqing was the president as well as a professor of public health. Back then, there was 1 special field in medicine. In 1928, the Fourth Zhongshan University School of Medicine was changed to Zhongyang University School of Medicine. In September 1932, it was changed to National Shanghai Medical School. After the liberation, it was named Shanghai First Medical School in 1952.

From its inception to the present moment, it has already had over 50 years of history. In the 22 years before China was liberated, the country suffered from internal problems and external invasions. There were continuous wars and the institute was tested many times under gun fire. In January, 1932, the Japanese Army invaded Shanghai. The school buildings were destroyed by Japanese gun fire. The faculty and students insisted on teaching under extremely difficult conditions. In 1937, the war against Japan broke out. The faculty and students were actively involved in the work of taking care of the wounded in the battlefield. After Shanghai fell into enemy hands, National Shanghai Medical School was moved inland to Kinming. In 1940, it was moved from one place to another to Gele Mountain in Chongqing. Until after the war against Japan was won, it was then moved from Sichuan to Shanghai. The teaching was never interrupted.

Shanghai First Medical School has been known for its rigorous style and hard work. It is concerned particularly with the fundamental training of the students. It has a strict test system. The institute has carefully developed high level specialists in medicine and health for our country. Furthermore, students with outstanding records were selected and sent abroad to continue their studies. A number of students gradually went abroad in the thirties. The institute had paid attention to

/118

the building up of a teaching team. Talents were carefully and seriously selected. As long as one has some specialities and is enthusiastic about medical education, he will be retained as a faculty member to teach full time. Even clinically famous doctors had to abandon their practices to concentrate on developing special talents. The school uses "straightening relationship and understanding the right way" as the school motto. It provides the philosophy of not caring for profit but for serving the society and the people. Before the liberation, due to the fact that the Nationalist reactionaries were not concerned with the development of health education, the scale of the school was very small. The development was gradual. Until the eve of the liberation, there were only two departments of medicine and pharmacy and two teaching hospitals - Zhongshan Hospital and Huashan Hospital. There were 119 faculty members. The total number of beds in the teaching hospitals was less than 800. In the 22 years before our liberation, it had trained a total of 535 graduates.



The teaching area of Shanghai First Medical School

In 1949, the entire country was liberated. Under the leadership of the Chinese Communist Party, the school obtained rapid development. In 1952, when the schools and departments of the higher education institutions in the nation were reorganized, the special class in medicine from Sino-French University, department of pharmacy from Zhejiang University, and department of pharmacy from Zhejiang Medical School were merged into the In the meantime, a public health institute (changed to school. the health department in 1955) was built. The name was determined to be Shanghai First Medical School. In order to suit the needs of socialist construction, and to accelerate the training of high level medical health talents, Shanghai First Medical School proceeded with a planned expansion. In addition to the 2 comprehensive teaching hospitals, it added 4 more specialized hospitals, i.e., the pediatric hospital, gynecology and obstetrics hospital, tumor hospital, and eye, ear, nose, and throat hospital. The school had 3 departments in medicine, health, and pharmacology, and 1 fundamental medicine division, as well as 4 research institutes, i.e., industrial health research institute, heart and blood vessel research institute, tumor research institute (later transferred away) and main and collateral channels research institute (later transferred away), 1 nursing school, and 1 pharmaceutical plant operated by the school. In the 31 years since we were liberated, Shanghai First Medical School has trained a total of 12, 380 graduates in various special fields (which is 23 times of that before we were liberated), 114 graduate students, and 8,968 advanced study students. They are working very hard on the front line of medicine and health. Many of them have become the backbone force in the work of clinical treatment, teaching and research.

As early as during the war against Japan, the progressive faculty and students of the school were actively involved in joining the campaign to resist the Japanese in order to save our country. Some of them joined the medical treatment surgical team, the epidemic prevention team, and the Chinese-Burmese rescue team. Some of the students lost their lives on the

anti-Japanese front line. During the liberation war period, the students were opposing the reactionary rule of the Nationalist Party. They were actively involved in the "anti-hunger, anti-civil war, anti-suppression" student movement. On the eve of our liberation, they formed a picket team to protect the school to welcome the liberation. After the entire country was liberated, the faculty, students and medical personnel of the school have participated, in many occasions, in large amounts of patriotic health work to eliminate diseases, to prevent and cure people from illnesses, including the voluntary medical surgical team in the campaign of Resisting the United States and Aiding Korea, epidemic prevention and examination teams, flood rescue surgical teams and earthquake rescue medical teams. Many comrades received awards because they were devoted to serving the injured with all their strength without fearing for their own lives.

Shanghai First Medical School has always been concerned with medical research work. In 1954, the scientific work committee was formed to formulate the research plan for the entire school. It was determined that the research key points were industrial health, schistosomiasis, traditional Chinese Medicine and Chinese herbs, and tuberculosis. The school undertakes approximately around 20 major research projects for the nation. On the average, it publishes approximately 200 papers per year. After **1957, Shanghai First Medical School strengthened the study** of radiology, tumor and heart and blood diseases, as well as the research on the essence of "kidney" in Chinese traditional /119 medicine and the organic phosphorus poisons in pesticides. In the sixties, it began to study the principle of curing headaches with acupuncture, invigorating the circulation of blood to remove clogging, and hand surgery, and had obtained some major accomplishments.

During the ten year period of chaos, the teaching, clinical, and research work at Shanghai First Medical School was seriously disrupted. It stopped accepting new students for 6 years. After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh People's Congress, the teaching, clinical and research work at Shanghai First Medical School was gradually restored and rapidly developed through correction of mistakes and organization of the teaching orders.

Shanghai First Medical School currently has 3 departments, and 1 division, under which there are 7 special fields and 60 teaching and research groups.

The programs for the two special fields in pharmacy and pharmaceutical chemistry are four years. The remaining programs are five years.

In 1980, Shanghai First Medical School had 2,290 undergraduate students, and 306 graduate students (the program is usually three years). The school serves as a base for the Ministry of Health employees to advance themselves. Each year, it also accepts 500 advanced study students from all over the country. Since 1974, it also began to undertake the duty to train foreign students. Currently, there are 30 foreign students.

In order to suit the needs of the teaching work, the school also has a good grasp of teaching material construction. Beginning in 1977, the school has been in charge of editing 10 nationally edited teaching materials. It also participated in the partial editing and writing of 56 teaching materials which were edited centrally. It also prepared 137 various kinds of lecture notes for itself. In addition, it also published a number of special books, such as ((Practical Internal Medicine)), ((Popularization of Medicine)), ((Ophthalmology)), ((Radiology)), ((Neurology)), ((Blood Vessel Surgery)), ((Pediatric Handbook)), etc.

The teaching team at Shanghai First Medical School is relatively strong. It includes a number of elder experts with a lot of expertise. The school main campus has 2,112 faculty and staff members. The entire institute has 72 professors (in which 31 yet awaiting approval), 160 associate professors (in which 129 yet awaiting approval), 614 lecturers, and 272 assistants. The famous scholars well known in the medical community include: Yan Fuqing, Zhu Hengloi, Huang Jiast, Qin Te, Hu Maolian, Shen Kefei, Cui Ziyi, Zhang Changshao, Rong Dushan, Xu Fangyan, Gu Jingyan, Lin Zhaoshe, Wu Shaoqing, Yang Guoliang, Chen Cuizhen, Wang Shuzhen, Guo Bingkuan, Su Telong, Shi Meixin, Zhu Yidong, etc.

Shanghai First Medical School presently has 12 research institutes and 19 research offices, in which 10 research institutes were established with the approval of the Ministry of Health in early 1979. These 10 research institutes are: Pediatrics Research Institute, Gynecology and Obstetrics Research Institute, Opthalmology Research Institute, Otolaryngology Research Institute, Mental Disorder Research Institute, Dermatology Research Institute, Nuclear Medicine Research Institute, Pharmacy Research Institute, Preventive Medicine Research Institute, and Fundamental Medicine Research Institute. These research institutes and research offices have a team of full time and part time research personnel. Modern research methods are used to study the fundamental, clinical, preventive, and pharmaceutical aspects of projects in Chinese traditional medicine theory, tumor, heart blood vessel, nerve, and planned birth, as well as the research on public health and preventive medicine. Great developments have been obtained. In 1978, the school was given 44 major accomplishment awards in the National Scientific Meeting. It received 59 major technical accomplishment awards in medical and health technology by the Ministry of Health. From 1979 to February 1980, it received 68 major technical accomplishment awards from the city of Shanghai. For example, the study of the principle of acupuncture analgesia, the study of liver cancer, the separation of toes to rebuild fingers by transplantation, the study of using aureomycia to treat fungus type cornea ulcer,

the development of artificial heart and lung machine, the direct view heart surgery using deep low temperature in-vitro circulation, the development and clinical application of biological valves, the study of prevention of Japanese schistosomiasis, the development of organic phosphorus pesticide and the study of the prevention of the poisoning of organic phosphorus pesticides, etc. were award winning projects.

The school presently edits and publishes ((Journal of Shanghai First Medical School)) (starting in 1956). In the meantime, it also edits and publishes foreign medicine - medical education books. They are distributed by post offices.

The school presently has 6 affiliated hospitals. There are 2,845 beds in total, in which Zhongshan Hospital has 840 beds, Huashan Hospital has 680 beds, Gynecology and Obstetrics Hospital has 321 beds, Pediatrics Hospital has 330 beds, Tumor Hospital has 400 beds, and Ear, Nose and Throat Hospital has 274 beds. Each hospital has an outpatient department and an inpatient department. The total number of medical personnel is 5,086, in which 1,155 are medical doctors, 1,509 are nurses, and 773 are medical technicians. Each year, the number of outpatient visits is approximately 2 million. Each year approximately 30 thousand people are discharged from the hospitals after being cured during their stay at the hospitals.

In order to improve teaching practice and special topic study, Shanghai First Medical School also established teaching collaboration relations with 24 hospitals, such as Shanghai City First People's Hospital, the Sixth People's Hospital, etc., and 6 pharmaceutical factories such as Shanghai Second Pharmaceutical Factory, the Fifth Pharmaceutical Factory, etc., and 6 immunization stations in Xujiahui area, Luwen area, etc., as well as organizations such as the Pharmaceuticals Research Institute of Chinese Academy of Sciences, Organic Chemistry Research Institute, etc.

In recent years, Shanghai First Medical School has also been involved in the cooperation and exchange between schools in and out of the country. Among the medical schools in the country,

the school has established school to school cooperation with Beijing Medical School, Zhongshan Medical School, and Sichuan Medical School. In the city of Shanghai, the school established key university collaboration with Shanghai Jiaotong University, Fudan University, Tongji University, and Huadong Normal University. In foreign countries, Shanghai First Medical School also established school to school relations with some famous university medical schools and medical centers. The school retains experts and professors in and out of the country to teach part time, to lecture, to guide laboratory construction, and to participate in research work. In the meantime, oustanding faculty and students were selected and sent to visit, study, participate in research, lecture, and international academic activities abroad. In addition, the school and its affiliated hospitals have received the visits of academic groups and educational, health, and research organizations. Each year, approximately 2,000 people will do so. Through these activities, the friendship between us and other countries is improved. It also promotes the teaching, treatment, and research work at the school.

•

The school library currently has over 320 thousand Chinese and foreign books as well as over 1,400 Chinese and foreign periodicals.

The main campus of the school (not including the affiliated units) has 148 laboratories. It owns electronic computers, an electron microscope, a super high speed centrifuge, a high pressure liquid chromatograph, a liquid scintillating counter, etc. In addition, it has color video recorder equipment to be used for teaching, research, and academic exchange activities.

The main campus of the school occupies 324 acres of land. There are close to 120 thousand square meters of building space.

Shanghai First Medical School is presently under the jurisdiction of the Ministry of Education.

School Anniversary Date: September 12th Current President: Shi Meixin Huadong Normal University

School Address: Zhongshan North Road, Shanghai

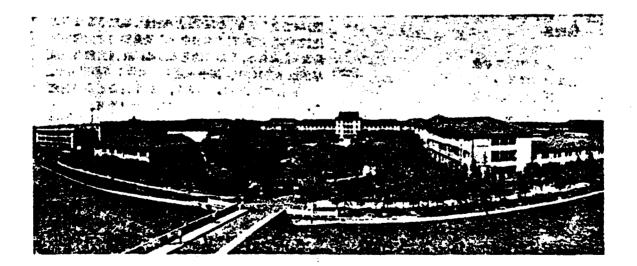
/120

Huadong Normal University was founded in September 1951. At that time, Daxia University and Guanghua University were used as the foundation of the school. It was started at the site of the original Daxia University by transferring part of the departments and faculty members from Fudan University, Tongji University, Hujiang University and Dongya Athletic Special School. In September 1952, when the schools and departments of all the higher education institutions were reorganized, part of the departments and faculty members from St. Johns University, Zhendan University, Zhendan Woman's College of Arts and Sciences, Jiaotong University, Datong University and Zhejiang University were merged into Huadong Normal University. During the initial period after the school was founded, it had 11 departments in education, Chinese, history, foreign language, mathematics, physics, chemistry, /121 biology, geology, music, and physical education. The entire school was 1,032 students and 338 faculty and staff members, in which there were 70 professors and associate professors, 14 lecturers, and 47 assistants. After the reorganization of schools and departments, Huadong Normal University added a political education department and 9 special classes. In the meantime, the physical education department was transferred to Huadong Athletic Institute. In the summer of 1956, the music department was transferred to Beijing Arts Normal Special School and Shanghai Music Institute. In order to suit the need of the development of higher normal education, the school established a graduate division in 1952 to train graduate students. In **1956, it established** a correspondence division and set up 7 special classes in Chinese, history, geography, mathematics, physics, chemistry and biology. It began to accept correspondence students in the Huadong area.

Huadong Normal University was relatively concerned with operating according to the rules in teaching in the 15 years since its inception until 1966. It promoted a good school style and accumulated some experience in operating a school. There were over 900 people on the faculty team. It grew more

than 7 times compared to that when the school was first founded. A number of relatively high level special fields and 72 laboratories were established. Over 10 thousand square meters meters of building space was newly built. The building area was more than 7 times larger than that when the school was first established. A large number of instruments and equipment had been purchased. It also acquired millions of volumes of books and information.

In the ten year period of chaos, Huadong Normal University was seriously damaged. It stopped accepting students for 4 years. In May 1972, Huadong Normal University merged with Shanghai Normal Institute, Shanghai Education Institute, Shanghai Athletic Institute and Shanghai Work Study Normal Institute, and the name was changed to Shanghai Normal University. After the "Gang of Four" was crushed, the other schools were reinstated one by one. In July 1980, it restored the original name - Huadong Normal University with the approval of the Ministry of Education.



A long range view of the campus of Huadong Normal University

Since the Third Central Committee Meeting of the Eleventh Party Congress, Huadong Normal University obtained rapid restoration and development through correction and reorganization. The faculty members were returned to their special fields to fully utilize their expertise. In teaching, it is particularly concerned with and has strengthened the teaching of fundamental theories and experimental courses. It is paying attention to the modern educational technical means and the application of electronic computers. The quality of teaching continues to improve. In the areas of philosophy and social science, it has completed 72 publications and a number of research papers. Among them, the publication of special books and research data such as ((Education)) Liu Fonian editor-in-chief; ((Collection of Comments on Chinese History)), ((Collection of Letters of Wang Guowei)) and ((Shuijin Note Corrected by Wang)) Wu Zhe editor-in-chief; 7 ancient books such as ((New Collection of Poems in the Tang Dynasty)), ((New Five Dynasties History)), etc. punctuated by Xu Zhener; and the ((Collection of Comments on Moral Problems)) by Zhou Yuanbing, received attention and good reviews by the relevant area. In the area of natural science research, the school obtained 30 major technical accomplishments in 1978. Among them, 8 projects such as the study of river mouth coast, uranium extraction from seawater, che study of protozoon nucleus relationship, the study of the group life of wild animals, the neural principle of acupuncture analgesia, the six piece demountable magnetic disc, the KLS-409 hydrogen sulfide analyzer, etc. received National Scientific Meeting Major Technical accomplishment awards. In 1979, the school obtained 24 technical accomplishments, among them 10 items, including the effect of cellular mass flow on the "nucleus relationship" of protozoon cells, the monitoring of atmospheric pollution using a carbon dioxide laser, the di-nitrogen chlorine phosphorus-mA, the continuous carbon monoxide in atmosphere, the DJS-112 electronic computer, quality evaluation of soil contamination in the Wusong area in Baoshan, Shanghai, and oxygenated ester, received Shanghai major technical accomplishment awards. Two projects obtained major technical accomplishment awards given by the Central Government and the relevant committee in the State

hers - 1

Council. Zhang Zuoren in the biology department has been studying the protozoon nucleus and his work is at an advanced level. In 1980, the school also had 17 technical accomplishments pass evaluation.

Huadong Normal University presently has 14 departments and 22 special fields.

Education Department School Education Special Field Chinese Language and Literature Department Chinese Language and Literature Special Field Political Education Department Philosophy Special Field Political Economics Special Field Political Education Special Field History Department History Special Field Foreign Language Department English Special Field German Special Field French Special Field Japanese Special Field Russian Special Field Library Science Department Library Science Special Field Mathematics Department Mathematics Special Field Physics Department Physics Special Field Radio Physics Special Field Computer Science Department Computer Science Special Field Chemistry Department Chemistry Special Field **Bioloby** Department **Biology Special Field** Psychology Department Psychology Special Field Geography Department Geography Special Field Geomorphology Special Field Physical Education Department Physical Education Special Field

/122

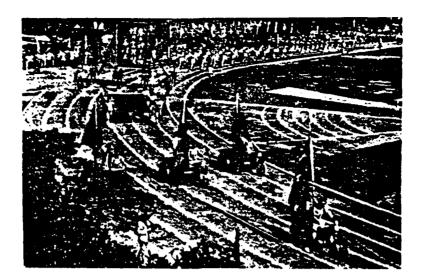
The special fields and undergraduate programs are all four years. The graduate student programs are divided into 3 types: four years, three years, and two years.

Huadong Normal University had 5,115 undergraduate students, 340 graduate students, and 80 foreign students in 1980. In addition, the school also has a branch campus called Huadong Normal University Instrumentation and Electronics Branch which

is operated in collaboration with Shanghai Instrument Bureau. Furthermore, it also promotes part time higher education using the forms of correspondence, television, and evening college. The entire university presently has 3,100 faculty and staff members, of which 1,323 are teachers. Among the teaching staff, there are 68 professors, 129 associate professors, 785 lecturers, and 259 assistants. Among the professors, there are many scholars and experts who are really knowledgeable, including Liu Fonian, Shen Baiying, Wu Ze, Fong Qi, Xu Zhener, Shi Zhecun, Xu Jie, Xu Zhongyu, Qin Guying, Sun Dayu, Li Yuzhen, Dia Jiaxiang, Chen Biaoru, Zhou Yuanbing, Li Ruifu, Cheng Qixiang, Wei Zongshu, Cao Xihua, Qin Ruizhuang, Zuo Renxia, Hu Jinan, Hu Huanyang, Li Chuanfen, Chen Jiyu, Chen Hankui, Xu Guobao, Zheng Yishan, Zhang Zuoren, Zhang Zonghan, Zheng Mian, Zhang Mengwen, Xia Yan, Gu Kequan, etc. Among the middle aged teachers, there are outstanding ones around.

Huadong Normal University currently has 7 research institutes such as educational science, foreign education, Chinese history, Western Europe, and North America Geography, River Mouth coast line, modern education techniques, and environmental science, as well as 19 research offices in economics, Chinese philosophy history, Chinese classical literature, Chinese modern literature, word reform, organization of ancient books, Chinese peasant war history, Chinese modern history, world modern history, applied mathematics, microwave, wave spectrum, organic synthesis, seawater resources chemistry, cellular biology, animal ecology, brain function development psychology, natural dialectics and 173 instructors in natural science history. In order to strengthen the education for scientific research and the development of scientific and education personnel, the school also established an education science institute.

360



Entrance ceremony of the Athletic Competition games at Huadong Normal University.

The library of Huadong Normal University has a total number of 1.54 million volumes of books, of which 950 thousand are Chinese books, 260 thousand are ancient books, and 220 thousand are foreign books. In addition, there are over 10 thousand periodicals and 140 thousand bound volumes of periodicals. Among the collection, there are relatively complete collections in education, psychology, classical philosophy, geography, and local legends. In the rare book area, ((The Duofu Pagoda response tablet written by Yan Zhenqin in the Tang Dynasty)) was copied in the Northern Song Dynasty. It is an artistic treasure. The earliest edition of the foreign books in the collection is dated 1630. The library building area is over 10 thousand square meters.

The science disciplines in the school have 55 laboratories. The instruments and equipment have been gradually supplied. In addition, a computer room and an audio-visual studio have been built. Huadong Normal University has a publishing company. In addition to publishing textbooks, publications, and reference books in education science, philosophy and social science, and natural sciences, as well as translated foreign books, it also publishes ((Journal of Huadong Normal University)) (natural science edition and philosophy and social science edition), as well as over 20 magazines such as ((Teaching Mathematics)), ((Teaching Chemistry)), ((Teaching Biology)), ((Teaching Foreign Language in Shanghai)), ((Communication of Psychological Science)), ((Study on the Theory of Arts)), ((Lex'cography)), ((Report on Foreign Literature)), ((Information on Foreign Education)), ((Problems in Teaching History)), etc.

The school also operates a scientific teaching instrument plant, a chemical engineering plant, and a printing plant. It develops and produces 22 scientific research and teaching instruments and products such as small digital electronic computers, network equipment, symbol display terminals, magnetic disc storage, optical equipment seats, oscilloscopes, special radio instruments and equipment, synthetic resins and various reagents. The school also has affiliated organizations such as the affiliated high school, affiliated elementary school and kindergarten.

Huadong Normal University currently occupies 855 acres of land. The school building area is 200 thousand square meters.

In recent years, Huadong Normal University has established school to school relationships and begun academic exhanges with 28 higher education institutions in other countries. A number of foreign professors have been retained as consulting professors. In the meantime, 42 outstanding teachers were sent to foreign higher learning institutions and research organizations to study, lecture, and investigate or to attend international academic meetings.

In the 30 years since the school was founded, Huadong Normal University has developed 22,951 college graduates and over 800 graduate students for the country. In addition, it has trained 285 foreign students.

Huadong Normal University is currently under the jurisdiction of the Ministry of Education.

School Anniversary Date: October 2nd Current President: Liu Fonian Secretary of Party Committee: Shi Ping

## Shanghai Foreign Language Institute

School Address: West Athletic Road, Shanghai

The predecessor of Shanghai Foreign Language Institute was Shanghai Russian Special School, which was founded in December 1949. The school was established due to the direct concern of the mayor of the city of Shanghai at the time - Chen Yi. The school was founded in the original Shanghai Jinan University.

In 1950, Shanghai Russian Special School added special fields in English, Indonesian, Burmese, and Vietnamese. The experience and tradition in the old liberated area were inherited in the way to operate the school. In the same time as political education is stressed, the students are encouraged to learn their special fields well. The food and lodging of the students were at the same level as cadres in the military and in politics. After graduation, they were assigned jobs through a unified system. In 1952, when the schools and departments in all the higher learning institutions underwent reorganization, part of the faculty and staff members of the original Shanghai Hujiang University and the students of Nanjing Military Foreign Language School were transferred to Shanghai Russian Special School. In the meantime, the 3 special fields - Indonesian, Burmese, and Vietnamese at the Russian Special School were moved to Beijing University. The English Special field was terminated. It only had the Russian special field. The program was three In 1955, it began to accept graduate students. years.

In order to suit the needs in the department of national construction and in international contact, the school added 3 special fields in English, German and French in 1956. It was officially changed to Shanghai Foreign Language Institute. The program was four years. In 1957, the students of the department of foreign languages of Shandong University were transferred into the institute. In 1958, after the foreign language department of Shanghai Second Normal Institute was merged into

363

/123

the school, it newly established a foreign trade language department (the department was moved out of the school in 1960; on its basis the Shanghai Foreign Trade Institute was founded). In 1963, Shanghai Foreign Language Institute set up a preparatory department for students who were going abroad to advance their studies, and an affiliated foreign language school. In 1964, it was listed to be under the direct jurisdiction of the Ministry of Education. Wang Jiyu was the president.

During the ten year period of chaos, Shanghai Foreign Language Institute was seriously damaged. It stopped accepting new students for as long as 6 years. It resumed recruiting in 1972.

Shanghai Foreign Language Institute is a specialized university especially set up to train people with foreign language talents. After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Party was held, the institute corrected all the wrongs and disorders through reorganizations and rearrangements. The school reconstructed a four year undergraduate teaching plan and the outlines for various special fields. Various departments and languages all prepared new teaching materials on their own. In the meantime, some teaching materials, which were introduced into the school, were adopted. In the teaching process, it particularly emphasizes the rigorous training in listening, reading, writing, and translating. The teaching method was reformed. Modernized foreign language teaching techniques, such as recording, video recording, close circuit television, movies, etc., are widely used. As the school strengthens classroom teaching, in the meantime, it also actively creates foreign language environments. Various types of foreign language extracurricular activities and foreign affairs practice events are initiated. The quality of teaching continues to improve.

Shanghai Foreign Language Institute presently has 4 departments and 10 special fields. The undergraduate program is either four or five years.

English Department English Special Field Western Languages and Russian Department Russian Special Field Spanish Special Field Italian Special Field Portuguese Special Field Greek Special Field German And French Department German Special Field French Special Field Japanese and Arabic Department Japanese Special Field Arabic Special Field

In 1980, there were 1,478 undergraduate students, and 48 graduate students in school. The graduate program is either two or three years.

In addition, the school also has 151 special class students. There are three special classes in English, German and Japanese. The program is two to three years. The main purpose is to train high school teachers and ordinary interpreters.

Shanghai Foreign Language Institute presently has 1,404 faculty and staff members in total, of which 588 are faculty members. Among the teaching staff, there are 12 professors, 37 associate professors, and 300 lecturers. Among the present faculty members, people such as Fang Zhong, Hu Menghao, Qiu Shaoheng, Yang Xiaoshi, Qi Zhusheng, Pu Yunnan, etc. have certain reputations in the foreign language education community in our country. In addition, the institute also retains some foreign experts as teachers each year. Presently, there are 33 foreign experts.

Shanghai Foreign Language Institute currently has the following techniques and scientific research organizations and publishing organizations:

Foreign Language and Literature Institute, which primarily studies language theories, foreign language teaching methods and foreign literature. It has 14 full time research people.

Shanghai Foreign Language Teaching Information Center, whose major duty is to collect, bring in, study, translate and edit, reproduce, and introduce to people in and out of the country the books, information and documents on foreign language teaching. The working area is primarily concentrated in the Huadong area. Presently it has 10 full time employees.

365

/124

Shanghai Foreign Language Education Publishing Company, which mainly edits and publishes various foreign language teaching materials and reference books for higher learning institutions. The work is nationwide.

Shanghai Foreign Language Audio Visual Teaching Institute, which studies the effect of modern audio-visual equipment on the teaching of foreign languages. It produces movies, slides, and recordings as teaching materials. Currently, it has 93 workers. The audio visual teaching hall, which belongs to this institute, was built in 1964. There are 2,022 square meters of space. It was the first audio-visual lecture hall built in our country.

In addition, there are the Russian Problems Research Office and Arabic Culture Study Room, etc.

Shanghai Foreign Language Institute edits and publishes ((Foreign Languages)) (Journal of Shanghai Foreign Language Institute), which is a bi-monthly and distributed openly, as well as ((Arabic World)), ((Study of Russian Problems)), ((Audio Visual Teaching of Foreign Languages)), ((report on Foreign Language Information)), etc., which are internally distributed publications.

The library has a collection of over 530 thousand volumes, of which 280 thousand volumes are foreign books. There are also 754 periodicals.

The major affiliated organizations of the institute are: The printing shop, which is able to print Chinese and foreign books and magazines. It also accepts external printing work. And 'the evening college, which accepts current employees of the city of Shanghai. It has 4 special fields in English, German, French and Japanese. Each year, it accepts 400 people.

The affiliated foreign language school has 4 special fields in English, German, French and Japanese. Each year, it accepts 120 current graduates from elementary schools. The program is six years. It mainly supplies foreign language students to higher foreign language institutions.

The French broadcasting teaching division is responsible for the teaching of French over Shanghai People's Broadcasting Station.

Shanghai Foreign Language Institute occupies 184 acres of land. The building area is approximately 20 thousand square meters.



Student Dormitory Buildings at Shanghai Foreign Language Institute

Since its founding, Shanghai Foreign Language Institute has trained a total of 11,104 graduates.

Shanghai Foreign Language Institute is currently under the jurisdiction of the Ministry of Education.

School Anniversary Date: January 15th Current President: Wang Jiyu Secretary of Party Committee: Han Zongqi

/125



The Province of Jiangsu

Nanjing University

School Address: Han Kuo Road, Nanjing, Jiangsu



A corner of the campus of Nanjing University

Nanjing University was founded in 1902. It has been established for 78 years. In these 78 years, the Chinese society has undergone many changes. The listing of Nanjing University is a cross-section of the changes in the Chinese society.

The history of Nanjing University could go back to Sanjiang Normal School. Sanjiang Normal School was founded in 1902 by the Governor of Jiangsu and Zhejiang - Zhang Zidong in the Qing Dynasty. It was located at the original site of the Imperial College of the Ming Dynasty in Nanjing. Yang Guankui and Xu Naichang were the superintendents one after the other. Initially, it had 4 disciplines of physics and chemistry, agriculture and natural science, history and geography, and handicraft and painting. The program was three and a half years. Furthermore, it had an accelerated class (two years) and a super accelerated class (one year). In addition, it also had an affiliated high school and an affiliated elementary school. In order to learn from the "Mingzhi Reform" in Japan, a number of Japanese "coaches" were retained to teach at the school.

In 1905, Sanjiang Normal School was changed to Liangjiang Normal School. The military governor of Jiangning-Li Ruiqing was the superintendent. The school system and departments remained the same. During the Revolution of 1911, Liangjiang Normal School was terminated.

In 1914, all the principals of the provincial schools in the province of Jiangsu wrote jointly to recommend the establishment of Nanjing Higher Normal School on the original site of Liangjiang Normal School. With the approval of the Ministry of Education of the Beiyang Government, it began its classes in September 1915.

In April 1920, the school affairs meeting of Nanjing Higher Normal School passed a resolution to begin the planning work to set up a national university. In November, it was approved by the National Affairs Meeting in the Beiyang Government. The name was determined to be National Dongnan University. It had 4 disciplines in arts and sciences, education, agriculture, and engineering. It established a business program in Shanghai (in collaboration with Shanghai Jinan School). In 1923, Nanjing Higher Normal School was merged into National Dongnan University.

Dongnan University School of Arts and Sciences had departments such as Chinese, English, Western Literature, Philosophy, History, Geology, Political Economics, Mathematics, Physics, Chemistry, Psychology and Biology. The Education school had departments in education, physical education, and education psychology. The agriculture school had departments in agriculture, horticulture, livestock farming, plant disease and insect pests, agricultural chemistry, and silkworm cocoon. The engineering school had a mechanical engineering department. The business school in Shanghai was divided into departments such as accounting, banking, and business management. In 1926, Dongnan University adjusted its departmental arrangement. The arts and sciences school was divided into two separate schools of arts and sciences. The western literature department and English department were merged to become the foreign language department. The political economics department was divided into two departments - politics and economics. The biology department was split up into two departments - zoology and botany. The education school added a rural education department. The entire school had over 200 faculty and staff members and more than 1,600 students.

In 1927, the Nationalist Party tried out the college in trict system in the provinces of Jiangsu and Zhejiang.

Dongnan University was merged with Sea and River Engineering University, Shanghai Business College, Jiangsu Law and Politics University, Nanjing Industrial Special School, Suzhou Industrial Special School, Jiangsu Medical School, Shanghai Business Special School, and Nanjing Agriculture School to form the National Fourth Zhongshan University. In the meantime, the education bureau of Jiangsu province was abolished. An education administration department was established at National Fourth Zhongshan University to take care of the administrative affairs in the college district. The name was University Main Office. With the exception of the education administration department, there were 9 schools; 6 schools including the school of literature, school of philosophy, school of natural sciences, school of social sciences, school of engineering, and school of education were located at Sipailou. The school of agriculture was located at Sanpailou. The business school and medical school were in Shanghai. In March 1928, National Fourth Zhongshan University was changed to Jiangsu University according to a resolution passed by the university committee of the Nationalist Government. In May of the same year, it was changed to National Central University.

In August 1928, Central University underwent reorganization of schools and departments. The natural science school was changed to the school of science. The social science school was changed to the school of law. The philosophy school was merged into the school of liberal arts. The history and geography department and the social science department were transferred to the school of liberal arts from the school of social sciences. The department of history and geography was changed to the department of history. Other science courses were transferred to the department of geology in the school of science. The education administrative department was moved to Zhenjiang. It was placed under the jurisdiction of the education bureau of the province of Jiangsu. Later on, the Nationalist Government stopped the college district system experiment. The main office of Central University was no longer in existence. In 1932, National Central University School of Business was again changed to National Shanghai Business Institute. The medical school was

changed to National Shanghai Medical School. In 1935, Central University set up another medical school in Nanjing. It also had an affiliated National Dentistry Special School. Through reorganization, Central University had 7 schools in liberal arts, science, law, education, agriculture, engineering and medicine. Under these schools, there were 34 departments. There were 330 teachers and 2,514 students in school.

In 1937, the "July 7th" incident occurred. In August, Central University was moved west into Sichuan. With the exception that the school of medicine and the livestock and veterinary medicine department in the agriculture school were moved to Chengdu, the remaining departments were relocated to Chongqing. In the summer of 1938, Central University School of Education was changed to Normal Institute. A branch campus was established at Boxi which is 30 miles away.

After the Japanese surrendered, in the first half of 1946, Central University moved eastward in groups. The 5 schools of liberal arts, science, law, engineering and teacher training as well as a part of the agriculture school and the affiliated medical school were located at Xipailou in Nanjing. It was called the First Division of the school. It was built and expanded on the original sites of Liangjiang Normal School and Ningshu Normal School. The medical school, the agriculture school and all the freshmen of the university, as well as the preparatory class, were located at Dingjia Bridge. It was called the Second Division. The address was north of Dingjia Bridge. It was the original site of Nanyang Trading Company.

Until the eve of our liberation, Central University had 7 schools and 42 departments. The school of liberal arts had 5 departments and classes in Chinese, foreign language, history, philosophy, and Russian special class. The school of science had 8 departments - mathematics, physics, chemistry, biology, geology, geography, psychology, and meteorology. The law school had 6 departments - law, political science, economics, social science, law enforcement, and border area administration. The normal school had 4 departments and one special class - education,

/126

physical education, arts, and physical education special class agricultural economics, forestry, horticulture, agricultural chemistry, livestock and veterinary medicine, and livestock and veterinary medicine special class. The engineering school had 7 departments in civil engineering, electrical engineering, mechanical engineering, architecture engineering, chemical engineering, aeronautical engineering and hydraulic engineering. The medical school had 5 departments and classes such as medicine, dentistry, dentistry special class, nursing teacher special class, and advanced medical test professional class. According to the statistics taken in January 1947, the entire school had 1,266 faculty and staff members and 4,066 students.

As early as the May 4th movement period, the progressive faculty and students at Nanjing Higher Normal Institute had shown their patriotic enthusiasm and became the major power behind the student movement in Nanjing back then. A student representative was elected as the chairman of the Nanjing Student Union.

After the "September 18th" incident broke out, the Nationalist Army gradually retreated. On November 30, Beijing University initiated and organized a demonstration group to go south. In Nanjing, they were suppressed by the Nationalist Government. On the 15th and 17th of December, the progressive students at Central University held a meeting in support of their activities. They joined the other students who were in Nanjing. They surrounded the Nationalist Party Headquarters and smashed the Central Daily News, and were slaughtered by the reactionary army and police.

In December 1946, after the Shen Chong incident broke out in Peiping, the progressive students from Central University, Jingling University and Drama Special School passed a joint declaration against brutality. They went on strike and began to march. In 1947, the faculty and students of the university were actively involved in the struggle against hunger, oppression and civil war. On May 20th, Central University led over 8,000 faculty and students from over 10 schools in the Nanjing, Shanghai, Suzhou,

and Hangzhou aea in a march in Nanjing. On their way, they encountered the resistance of the Nationalist reactionary military police. This triggered the "May 20th" bloody incident which shocked the nation. On April 1, 1949, the Nationalist Party sent the "Peace Representative Group" to the north to start a peace talk. The progressive students of Central University and other schools held a ten thousand person march to "fight for survival and search for peace". The march was again brutally suppressed by the Nationalist Party. On the spot, there were over 200 injured, more than 70 seriously hurt, over 50 disappeared, and 3 dead after suffering severe injury. Central University students Cheng Luyi and Cheng Yibing sacrificed their lives. This is the famous "April 1st" tragedy.

Chairman Mao Tsetung released two articles ((Chiang Keishiek's Government is surrounded by the people)) and ((Where can the Nanjing Government go)) in response to the "May 20th" and "April 1st" student movements, respectively.

On April 23, 1949, the People's Liberation Army occupied Nanjing. It opened a new chapter in the history of Nanjing University. On August 8, 1949, Central University was officially changed to National Nanjing University.

From July to September in 1952, Nanjing University underwent reorganization of schools and departments.

The engineering school becamse independent and changed to Nanjing Engineering Institute. The aeronautic department in the engineering school was merged with the aeronautic department of Shanghai Jiaotong University and the aeronautic department of Zhejiang University to form Huadong Aeronautical Institute. The water conservancy engineering department in the engineering school was merged with the water conservancy engineering epartment of Jiaotong University to become the Huadong Water Conservancy Institute. The school of agriculture was merged with the school of agriculture of Jingling University to become the Nanjing Agriculture Institute. The normal school became independent and was called Nanjing Normal Institute. The forestry departments and forest special fields in the agriculture school of the original Nanjing University and Jingling University were consolidated. It became the Nanjing Forestry Institute. The physical education department and physical education special fields were transferred to Huadong Athletic Institute. The department of philosophy was given to Beijing University. The law and politics departments were transferred to Huadong Institute of Politics and Law. The department of economics was given to Fudan University. The medical school was changed to the Fifth Military Medical University of Chinese People's Liberation Army.

The reorganized Nanjing University used the schools of arts and sciences of Nanjing University and Jingling University as the major body with the addition of the German group of the foreign language department of Fudan University, the astronomy department of Qilu University, the astronomy department of Zhongshan University and part of the departments of Zhejiang University. It had 13 departments in Chinese, Western languages, Russian, history, mathematics, physics, chemistry, biology, psychology, geology, geography, meteorology, and astronomy. There were 490 faculty, staff and worker members, of which 253 were teachers. Among the teaching staff, there were 86 professors, 26 associate professors, 42 lecturers, and 99 assistants. The entire school has 1,262 undergraduate students, 482 special class students, and 2 graduate students.

After the reorganization of schools and departments, the scale of Nanjing University continued to grow. The special fields offered were gradually expanded. It gradually set up a number of new special fields such as in acoustics, nuclear physics, semiconductors, low temperature, polymers, computation mathematics, computer (software and hardware), and biochemistry. In 1955, the university resumed accepting graduate students. In 1956, the undergraduate program was changed from four to five years. In 1963, the Chinese department and meteorology department began to accept foreign students. In 1960, the political science department was established. In 1965, the total number of students in school reached 6,250. As compared to that when the schools and department were reorganized, it increased by nearly 3 times. In the meantime, the scientific research work at

Nanjing University also continued to obtain new results. Some of the research projects such as Huanan granite, molecular sieve, crystal defect, husked rice weed, and computer software obtained significant results. The research accomplishments of the two projects ((The study and observation of metal crystal defects)) and ((The study of granite at various stages in Southen China)) were listed by the National Scientific Committee into the ((Collection of Major National Scientific Research Accomplishments in 1963, 1964 (100 projects) )).

During the ten year period of chaos, Nanjing University was seriously damaged. It stopped recruiting for as long as 6 years. It resumed accepting students in 1972. The program was changed to three years. The quality of teaching decreased. After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Party Congress, the work in various aspects at Nanjing University began to progress steadily.

Nanjing University presently has 15 departments (the law department is under planning) and 42 special fields.

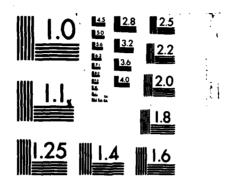
Chinese Department Chinese Language and Literature Special Field History Department History Special Field Archaeology Special Field Philosophy Department Philosophy Special Field Law Department Law Special Field Economics Department Political Economics Special Field Economic Management Special Field Foreign Language Department English Special Field German Special Field French Special Field Japanese Special Field Spanish Special Field Russian Special Field Mathematics Department Mathematics Special Field Computation Mathematics Special Field Mathematical Logic Special Field Information Detection and Automation Special Field Computer Science Department Computer System Structure Special Field Computer Software Special Field

/127

Physics Department Physics Special Field Radio Physics Special Field Nuclear Physics Special Field Acoustics Special Field Chemistry Department Polymer Synthetic Material Special Field Chemistry Special Field Biology Department Biochemistry Special Field Botany Special Field Physiology Special Field Zoology Special Field Astronomy Department Astronomy Special Field Meteorology Department Atmospheric Physics Special Field Meteorology Special Field Climate Special Field Geology Department Structural Geology - Geophysics Special Field Hydrological Geology and Engineering Geology Special Field Mineral Rock Ore Geochemistry Special Field Radioactive Geology Special Field Pulaeontological Geology Special Field Geography Department Economical Geography Special Field Cartography Special Field Land Hydrology Special Field Geomorphology and Quaternary Period Geology Special Field

In 1977, the program at Nanjing University was changed to four years. In 1978, various departments began to accept graduate students. Furthermore, it began to accept foreign students, advanced study students, and visiting scholars working on the research of human sciences. By 1980 the school had 4,727 undergraduate students 669 special students, 325 graduate students, and 75 foreign students in 1980. Nanjing University had already begun to try out the credit system and the elective system starting with the new students in 1978. Beginning 1980, the credit system was used throughout the school. The range of elective courses In 1978, the school offered a one year Chinese was extended. course to all the departments in arts and sciences, with the exception of the Chinese department, in order to improve the reading and writing capability of the students. Starting from 1981, the school offers degrees to outstanding graduate students who graduate.

| THD | -A13  | 7 587 | BRI<br>CHI | EF INT<br>NA(U)<br>TAN 84                                                                                                   |  | TION T<br>SN TEC | 0 HIGH<br>HNOLOG<br>T-1082 | ER EDU<br>Y DIV | JCATIO<br>WRIGH | N INST<br>T-PATT | ITUTIO<br>Erson | NS IN<br>AFB OF | 57  | 9  |  |
|-----|-------|-------|------------|-----------------------------------------------------------------------------------------------------------------------------|--|------------------|----------------------------|-----------------|-----------------|------------------|-----------------|-----------------|-----|----|--|
| UN  | ICLAS | SIFIE | D 12       | BRIEF INTRODUCTION TO HIGHER EDUCATION INST<br>CHINA(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATT<br>12 JAN 84 FTD-ID(RS)T-1082-83 |  |                  |                            |                 |                 |                  |                 | F/G 5/9         |     | NL |  |
|     |       |       |            | 1                                                                                                                           |  |                  | æ                          |                 |                 |                  |                 |                 |     | 51 |  |
|     | ĸ     |       |            |                                                                                                                             |  |                  |                            |                 |                 |                  |                 |                 |     |    |  |
|     |       |       |            |                                                                                                                             |  |                  |                            |                 |                 |                  |                 |                 |     |    |  |
|     |       |       |            | -                                                                                                                           |  |                  |                            |                 |                 |                  |                 |                 |     |    |  |
|     |       |       |            |                                                                                                                             |  |                  |                            |                 |                 |                  |                 |                 | 214 |    |  |
|     |       |       |            | د <b>ق</b> ه                                                                                                                |  |                  |                            |                 |                 |                  |                 |                 | k # |    |  |
| U   | 734   |       |            |                                                                                                                             |  |                  |                            |                 |                 |                  |                 |                 |     |    |  |
|     |       |       |            |                                                                                                                             |  |                  |                            |                 |                 |                  |                 | -               | 5   |    |  |



MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A

Nanjing University presently has 3,461 faculty and staff members, of which 1,772 are teaching staff members (including full time scientific research personnel). Among the teaching staff, there are 78 professors, 72 associate professors, 1,209 lecturers, 296 assistants, 79 teachers, and 38 practice assistants. In addition, there are 26 foreign teachers and engineering technical personnel.

In the history of Nanjing University, there have been many internationally famous scholars. For example, Professors Li Siguang, Zhu Kezhen, Wu Yuxun, Li Fangxun, Dai Wensai, Hu Xiuoshi, Fang Guangxi, He Changqun and Luo Genze have taught and done research work here. Currently, the university still has many experts and professors who are very knowledgeable. For example, they include Fan Chunzhong, Chen Jia, Chen Baichen, Han Rulin, Sun Suping, Gao Jiyu, Dai Anbang, Gao Hong, Xu Keqing, Ren Meier, Zhing Ji, Wei Rongjue, Feng Duan, Bao Jiasheng, Ye Yanqian, Mo Shaokui, Huang Shisong, etc. In the middle aged teachers, a number of outstanding ones have also emerged.

In recent years, the scientific research at Nanjing University has obtained new accomplishments. In the 1978 National Scientific Meeting, it received awards in 48 research projects. In some scientific research items, such as Southern China granite, crystal defects, computer software, etc., it has already formed its own characteristics through many years of work. The research organizations in the school were gradually reinforced and strengthened. Presently, in scientific areas there are 10 research institutes: acoustic research institute, granite, volcanic rock formation theory institute, husked rice weed and coastal development, complex chemistry institute, environmental protection institute, and mathematics institute. In the area of arts, there are 6 research organizations: foreign literature institute, religion research institute, British and American foreign policy research office, African economic geography research office, and drama study office. The academic atmosphere is very thick. Each week, there is an "academic day". A school wide scientific meeting is held each year on the anniversary day.

Nanjing University edits and publishes academic journals such as ((Journal of Nanjing University)) (divided into the natural science edition and the social science edition), ((Current Foreign Literature)), ((Journal of Mathematics)) (edited for the Ministry of Education), etc.

.

र र र र र र

The school library has a collection of over 2.7 million volumes of Chinese and foreign books, 3,744 kinds of Chinese and foreign newspapers and magazines, and more than 10 thousand pieces of historic documents. Currently, the school is constructing a new library building. After the new building is completed, the total building space after the library will be close to 20 thousand square meters.



Students of Nanjing University in the laboratory

Nanjing University currently has 147 laboratories. It owns 18,000 pieces of teaching and research instruments and equipment. They are worth 26 million Yuans. There are 47 pieces of large equipment and instruments whose unit price is over 50 thousand Yuans. The total value is close to 500 million Yuans. Presently, the school is actively constructing and expanding the computer center, modern analytical laboratories, and acoustics laboratories in order to bring the teaching and scientific research to a new level.

Nanjing University currently has 5 school operated factories, the printing shop, the low temperature plant, the instrument plant, the chemical engineering plant, and the biological pharmaceutical plant. The tasks to be undertaken by these factories include: testing and producing a number of products from results obtained in teaching and research in order to satisfy the need of the school itself and to provide a number of products for the society to the extent possible, fabricating, imitating and producing in quantity instruments and equipment needed in teaching and research which cannot be supplied by the society, maintaining and processing large and precision instruments, and printing of most of the teaching materials and information used by the school.

CONTRACTOR OF CONTRACTOR

- - -

Nanjing University currently occupies more than 600 acres of land. There are 220 thousand square meters of building space. As compared to that when the school and departments were reorganized, it has increased by more than 6 times.

In the past two years, the academic exchange activities with the outside have been increasing at Nanjing University. On one hand, it invited foreign scholars and professors to lecture and to participate in research activities at the university. On the other hand, students and teachers were selected to study abroad, to lecture, to carry our research activities, and to attend various international academic meetings. Nanjing University has already established frequent school to school academic contacts with 8 universities in foreign countries.

In the 30 years since we were liberated, Nanjing University has trained 20,381 people for our country, of which 20,144 are college graduates, and 267 graduate students. Quite a few of them have made significant accomplishments.

Nanjing University is presently under the jurisdiction of the Ministry of Education.

School Anniversary Date: May 20th

Honorary President: Kuang Yaming

Current Secretary of Party Committee: Zhang Te

Nanjing Engineering Institute

School Address: Sipailou, Nanjing, Jiangsu

Nanjing Engineering Institute is a multi-disciplinary industrial college. It is located on the shore of Xuanwu Lake in the city of Nanjing.

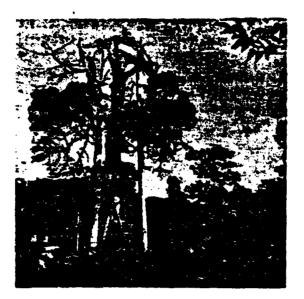
The predecessor of Nanjing Engineering Institute was the Higher Industrial School which was founded in 1904. In 1912, it was changed to Jiangsu Province First Industrial School. Later on, its name was changed several times. In 1923, it was merged with Nanjing Higher Normal School and the name was changed to Dongnan University. It had 5 subjects in arts and sciences, education, engineering, agriculture, and business. In 1927, Dongnan University merged with 9 other schools such as Shanghai Business University, Hehai Engineering University. etc. The name was changed to the Fourth Zhongshan University. In May, 1928, the name was changed to National Central University. In 1937, when the war against Japan broke out, Central University was moved to Chongqing. Furthermore, in 1939 branch campuses were set up in Chongqing Boxi and Chengdu Huaxiam. In 1946, it was moved back to Nanjing. After Nanjing was liberated, Central University was changed to Nanjing University. It had 7 schools in liberal arts, science, law, teacher training, agriculture, engineering and medicine. In 1952, when the schools and departments of the higher learning institutions were reorganized, Nanjing Engineering Institute was established on the original site of Central University.using Nanjing University School of Engineering as the foundation by consolidating the related departments and classes from 6 higher learning institutions including Jingling University, Jiangnan University, Jiaotong University, Zhejiang University, Xiamen University, and Shandong University.

666224243

AND CONTRACTOR AND CONTRACTOR

A CALL AND AND A

When Nanjing Engineering Institute was first founded, it had 7 departments in architecture, mechanical engineering, power, radio, civil engineering, chemical engineering, and food industry, as well as 20 special fields (including four year undergraduate programs and two year special classes). There were 33 teaching and research groups and 33 laboratories (including the practice factories). There were more than 300 faculty members, 500 staff members, and 2,600 students in school.



Historical Site on the campus of Nanjing Engineering Institute, the "Six Dynasty Pine" already has over 1,400 years of history.

Along with the development of socialist construction, in between 1958 and 1960, Nanjing Engineering Institute transferred out the food industry department, the chemical engineering department, and the agricultural machine department, and set up Wuxi Light Industry Institute, Nanjing Chemical Engineering Institute, and Zhenjiang Agricultural Machinery Institute, respectively. Furthermore, a number of teachers were transferred to support related institutions such as Chengdu Telecommunications Engineering Institute, Wuhan Survey and Drafting Institute, Jiangxi Engineering Institute, etc. In the same time, Nanjing Engineering Institute itself was also significantly developed. In the early sixties, it gradually set up a number of new special fields in automatic control, computer, semiconductors, etc. Until 1966, the entire institute already had 8 departments in construction engineering, mechanical engineering, power engineering, radio engineering, civil engineering, electronic device engineering, automatic control and fundamental courses, as well as 22 special fields and 57 teaching and research groups. In addition, there were 3 research offices in the areas of architecture,

power plant automation, and electrical vacuum devices, 66 laboratories, and 9 school operated factories (shops). The entire institute had a total of 1,145 faculty members, 1,151 workers, 5,730 students (including graduate students), and 853 evening college and correspondence students.

During the ten year period of chaos, it was seriously damaged. It did not accept any new students for 6 years. After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Party Congress, the school entered a new era of restoration and healthy development. /129

Nanjing Engineering Institute currently has 9 departments and 2 directly controlled teaching and research offices. There are 28 special fields under them.

> Architecture Engineering Department Architecture Special Field Mechanical Engineering Department Mechanical Manufacturing Technological Equipment and Automation Special Field Casting Special Field Radio Specialized Mechanical Equipment Special Field Radio Equipment Structural Design Special Field Metallic Materials Special Field Power Engineering Department Power System and Automation Special Field Electrical Technology Special Field Electric Plant Thermal Power Special Field Engineering Thermal Physics Special Field Radio Engineering Department Radio Technology Special Field Electronic Instrument and Measurement\_Technology Special **Field** Microwave Technology Special Field Acoustic Engineering Special Field Civil Engineering Department Construction Structural Engineering Special Field Road Engineering Special Field Building Materials Engineering Special Field Environmental Engineering Special Field Electronic Engineering Department Electric Vacuum Technology Special Field Laser Special Field Semiconductor Physics and Device Special Field Vacuum Physics and Technology Special Field Computer Science and Engineering Department Computer Science and Engineering Special Field Automatic Control Department Industrial Automation Special Field System Engineering Special Field Gyroscope and Precision Instrument Special Field

> > 382

Maria Artes

Fundamental Science Department Applied Mathematics Special Field Applied Physics Special Field Marxism and Leninism Teaching and Research Office Physical Education Teaching and Research Office

()

In 1977, Nanjing Engineering Institute resumed a four year undergraduate program. In 1978, it resumed accepting graduate students. The programs are divided into two types two years and four years.

In 1980, there were 5,175 students, of which 4,559 were undergraduate students, 425 special students, 132 graduate students, 32 in cadre classes, 5 advanced study students, and 22 foreign students. Currently, it has 2,954 faculty and staff members, of which 1,426 are teachers. Among the teachers, there are 48 professors, 195 associate professors, 980 lecturers, and 275 assistants, teachers and young teachers.

As early as the "May 4th" movement period and before the war against Japan, the progressive students and staff members organized various progressive groups, such as the "academic communities union" in the "May 4th" movement, and the "association against Japanese goods" and "faculty and staff committee to resist the Japanese to save the country" during the "September 18th" incident in 1931. They were actively involved in democratic and anti-Japanese movements. During the anti-Japanese war period and the Liberation War period, the school was located first in Chongqing and then in Nanjing. In the school, there was an underground organization of the Chinese Communist Party already. Furthermore, various secret outside organizations of the Party and progressive associations, such as the "New Democratic Youth Association," "Central University Alumni Association", "Natural Science Study Group," "Electricity Association," "Water Association," "Li Association," "Mustang Association," "Zhong Mountain Chorus," etc., were established to actively engage in struggles against imperialism, feudalism, and bureaucracy. In particular, the "May 20th" movement initiated and organized by the progressive students of Central University to oppose to hunger, civil war, and oppression in 1947, the "April 1st" campaign in 1949 which revealed the fact that the Nationalist Party was involved in

Enterinter Children in

untruthful peace, and the struggle to protect the school awaiting for its liberation, are the bright chapters in the history of the school. In the "April 1st" tragedy, Central University School of Engineering Department of Electrical Engineering student Cheng Yibing lost his valuable life.

The disciplines offered by Nanjing Engineering Institute are relatively complete. Most of the disciplines have already possessed the basic conditions to accept degreed graduate students. Some of the disciplines and special fields are among the advanced ones in the country. Departments of civil engineering, architecture, power, mechanical engineering, and radio are the ones which were established very early. The foundations are good. The equipment is comparatively complete and the quality of teachers is high. A teaching and research team consisting of some academic leaders and certain backbone personnel has already been formed preliminarily. The electronic engineering department and automatic control department were also established relatively early in the country. The characteristic of these two departments is that there are more middle aged and young backbone teachers in these departments. They are aggressive and dare to be creative. The teaching and research work has progressed very rapidly. The fundamental science department primarily offers all the fundamental courses for all the special fields in the institute. Presently, Nanjing Engineering Institute is fully utilizing its advantages to develop special personnel with even higher standards.

Nanjing Engineering Institute has many famous experts and professors such as Yang Tingbao, who is chief of the architecture research institute, Qian Zhonghan who is chief of the automation research institute, Lu Zhongzuo who is chief of the radio electronics research institute, as well as Tong Jia and Li Ruhua in the department of architecture, Shu Guangji in the department of mechanical engineering, Chen Jingyao in the department of power engineering, Chen Zhang in the department of radio engineering, Liu Shuxun, Fang Fusen and Ding Dajun in the department of civil engineering, and Hu Qianshan and Liang Ziming in the department of fundamental science. They have been involved in teaching and

scientific research for several decades and are very experienced. Their accomplishments are also significant. They have contributed greatly to the development of education and socialist construction.

The objective of Nanjing Engineering Institute is to develop high level engineering technical personnel who are solid in theoretical fundamentals, rich in specialized technology, and healthy. For graduate students, it is also required that they have the capability to carry out scientific work independently. Therefore, the school has always been concerned with its teaching work. It is especially particular about the quality of people under development. In the teaching requirements, more attention is given to the strengthening of the education of fundamental theories and basic knowledge. It emphasizes the training of basic skills and carries out the principle of "less but refined." As for the teaching method, it promotes the "initiation method" and only "teaches based on the talent." It works hard to develop the ability of students to analyze and solve problems. In the long term teaching practice, the institute has already developed the good tradition of hardworking, realistic, rigorous style. It emphasizes on the "three fundamentals." The school style is lively and full of morning spirits.

Nanjing Engineering Institute has always insisted on the principle of combining research results with teaching and has obtained many results. From 1963 to 1966, 39 scientific research accomplishments were included in the national scientific and technical research accomplishment notice. In 1978, in the National Scientific Meeting, it received 29 scientific awards. In the provincial scientific meeting, 22 research items received major research accomplishment awards. In the past two years, through the review and evaluation of peers in the country, 22 more items received major scientific research accomplishment awards in the province /130 of Jiangsu. They include: the design of a classical garden in Suzhou, the architecture design of a comprehensive hospital, the method to calculate distortion and crack of steel reinforced concrete and pre-stressed concrete structural pieces, the experimental study of steel reinforced concrete and pre-stressed concrete structural pieces under long term loads, the integrated

modular microwave retransmitting 1 GH2° system, the calculation method digital frequency synthesizer, the millimeter wave oscillator, a small helium circulation refrigeration machine, the digital controlled milling and boring machine, the rapid determination of the rate of iron sphere formation in front of a specific resistive furnace, the inversely installed large distance double level blower furnace, and the motion of air bubble, liquid droplet, and solid sphere in a viscous flow, etc.

Nanjing Engineering Institute currently has 7 research organizations including the architecture research institute, the automation research institute, the radio electronics research institute, the magnetohydrodynamic power generation research institute, the architectural design research institute, the computer center, and the large scale integrated circuit fabrication center. Every department also has research offices (groups). The entire institute has more than 200 full time research personnel. The amount of time dedicated to research by the faculty members on a part time basis is about one third of the work load of the teachers in the entire institute. It mainly undertakes the research tasks planned by the nation and entrusted by the production departments, as well as the research items selected by the school and the teachers. The primary area is in technological science and applied research; however, research on theoretical topics is also carried out.

The institute established an academic committee and a teaching method committee to discuss the problems encountered in teaching and scientific research. Opinions to improve the present situations are proposed. Furthermore, frequent academic exchange activities are organized. During the school anniversary period each year, the school holds large scale scientific seminars and discussion sessions. In recent years, the school frequently retains foreign experts and scholars to lecture, teach part-time, make academic reports, and visit the school. It also selects and sends teachers to school and the meantime, it also established school to school relations with a number of universities in other countries.

Nanjing Engineering Institute presently has 43 laboratories. It owns a number of precision and expensive instruments and equipment. The audio visual teaching center has complete sets of closed circuit color television equipment and video recorder systems which create the condition to improve the quality of teaching.

Nanjing Engineering Institute edits and publishes ((Journal of Nanjing Engineering Institute)) (quarterly) which is distributed openly all over the country.

The library at the institute has a collection of more than 600 thousand volumes of Chinese and foreign books and over 1,400 Chinese and foreign periodicals. The Ministry of Education also established a higher learning institution foreign teaching materials central reading room at Nanjing Engineering Institute. It has more than 5,000 volumes of foreign books to be borrowed by the faculty members of the higher learning institutions in the Eastern China area.

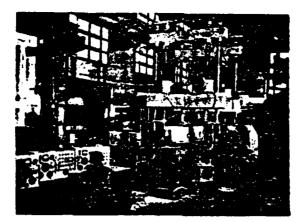
The institute runs 4 plants - a machine shop, an electronic tube plant, an electrical machine plant, and a printing shop. Every department also operates some plants or shops to undertake the tasks of teaching practice and development of teaching instruments, as well as to serve the needs in teaching and research. The school also runs service oriented organizations such as a kindergarten, a hospital, a cafeteria, and a bathroom facility.

Nanjing Engineering Institute occupies 531 acres of land. There are more than 220 thousand square meters of building space.

Since its founding, Nanjing Engineering Institute has already developed 23,420 high level technical people for our country. It has contributed to the socialist construction career.

Nanjing Engineering Institute is currently under the jurisdiction of the Ministry of Education.

Anniversary Date: October 15th Current President: Qian Zhonghan Secretary of Party Committee: Wu Jue



The Structure Laboratory at Nanjing Engineering Institute.

## Nanjing Aeronautical Institute

School Address: Yudao Street, Nanjing, Jiangsu

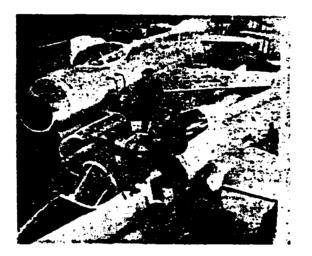
Nanjing Aeronautical Institute is a comprehensive higher learning institution in aeronautical science and technology which was founded after our country was liberated.

The predecessor of Nanjing Aeronautical Institute was Nanjing Aeronautical Industry Special School which was planned to be built in October 1951. It began to accept students in June 1952. The program was two and a half years. Back then there were 6 special fields in piston engines, jet engines, airplanes, instruments, electrical devices, and mechanical processing. In April 1956, Nanjing Aeronautical Industry Special School was changed to Nanjing Aeronautical Institute.

Nanjing Aeronautical Institute initially established 4 departments in aircraft, engine, special aeronautical equipment, and aeronautical mechanical manufacturing. There were 12 special fields. The program was five years. In 1957, after Suzhou Aeronautical Industry Special School was abolished, it was merged into Nanjing Aeronautical Institute to reinforce its strength. In 1965, Nanjing Aeronautical Institute had 2,647 students and 18 graduate students in school. It had 1,448 faculty and staff members, of which 639 were full time teachers.

During the ten year period of chaos, Nanjing Aeronautical Institute, as well as other higher learning institutions in the country, was damaged to various extents in all aspects. It stopped accepting new students for 5 years.

In 1977, Nanjing Aeronautical Institute began to practice a new recruiting system. In order to satisfy the needs of modernization, the scale of the institute has been gradually expanding. The special fields to offer were gradually perfected. Currently, the institute has 6 departments, 1 fundamental division and 17 special fields.



The students of Nanjing Aeronautical Institute practicing.

Aircraft Department Aircraft Design Special Field Helicopter Design Special Field High Altitude Aircraft Equipment Special Field Aeronautical Engine Department Aeronautical Turbine Engine Special Field Aeronautical Power Equipment Control Engineering Special Field Aeronautical Automatic Control Department Aircraft Automatic Control Special Field Aeronautical Gyroscope and Inertial Guidance Special Field Aeronautical Testing and Sensing Special Field Aeronautical Electrical Engineering Special Field Aeronautical Radio Department Electronic Computer Special Field Radar and Electronic Resistance Special Field Aeronautical Radio Communications Special Field Aeronautical Manufacturing Engineering Department Mechanical Manufacturing System Engineering Special Field Mechanical Automatic Control Engineering Special Field Electrical Processing Special Field Aircraft Manufacturing System Engineering Special Field

/131

## Aerodynamics Department Aerodynamics Special Field

Nanjing Aeronautical Institute had 2,742 undergraduate and 82 graduate students in school in 1980. Presently, there are 2,380 faculty and staff members, of which 970 are full time teachers. Among the full time teaching staff, there are 19 professors, 36 associate professors (in addition, there are 60 professors and associate professors yet to be approved), and 675 lecturers.

Presently, a number of famous scholars are teaching at Nanjing Aeronautical Institute. They include Professor Zhang Azhou who studied in his earlier years in the United States and earned a Ph.D. degree. He has been working in the teaching and research of structural dynamics over long periods of time. Presently, he is the vice president of Nanjing Aeronautical Institute, committee member of the Aeronautical Science and Technology Committee in the Third Mechanical Industry Ministry, and a representative in the Fifth National People's Congress. Professor Yun Yi has been involved in the teaching and scientific research work in the area of mechanical design with a lot of accomplishments. He has attended the advanced worker's representative meeting in Jiangsu. Presently, he is chief of the fundamental course division at the institute. Professor Zhang Shiying has been working on the design study of air jet engines for a long time. In recent years, he has obtained encouraging results in the study of air inlets of aircraft. Currently, he is chief of the engine research office, a member of the Aeronautical Science and Technology Committee in the Third Mechanical Industry Ministry, and an officer of the National Engineering and Thermal Physics Society. Professor Zheng Yanquan has been working on the teaching and research in aeronautical instruments and automatic control. Presently, he is the vice chairman of the academic committee of the institute, a member of the Aeronautical Science and Technology Committee in the Third Mechanical Industry Ministry, and an officer of the National Aeronautics Society. Professor Dai Changhui has studied in the United States and the Soviet Union. He is specialized in the teaching and research work on the experimental aerodynamics of aircrafts. Presently, he is the chairman of the aerodynamics

department, chairman of the aerodynamics research institute, and and officer of the China Aeronautics Society. Professor Yang Zhasheng has made considerable accomplishments in the study of theoretical aerodynamics. His research results have reached an advanced level in our country. He has obtained the National Scientific Meeting award. Professor Wang Shicun has been dedicated to the teaching and research work in the aerodynamics of helicopters. Presently, he is the chairman of the department of aircraft, a member of the Aeronautical Science and Technology Committee in the Third Mechanical Industry Ministry, and the vice group leader of the National Helicopter Technology Group. Professors Cheng Baoju and Zhang Youzhen, as well as Professor and vice president Yu Chengye, have been working on the teaching and research of the manufacturing technology of aeronautical vehicles. The scientific research work carried out by them all reached an advanced level in our country.

 $\Im$ 

Since its inception, Nanjing Aeronautical Institute has been concerned with developing scientific research in combination with teaching. It undertakes over a hundred scientific research tasks for the country and contributes to a certain extent to the development of aeronautical science and technology. It also improves the quality of teaching and the level of teachers at the school. In the National Scientific Meeting in 1978, Nanjing Aeronautical Institute had 11 scientific research results receiving awards. The scientific research team "Changkun No. 1" was rated as a nationally advanced unit.

In addition, the accomplishments of 35 research projects received awards in the Jiangsu Scientific Meeting. The pilotless aircraft, small helicopter, and microelectronic computer developed successfully by the institute have also reached advanced levels in the country. In addition, many theoretical and experimental research results have reached domestic advanced levels. They received the attention and good review of the leadership organizations and relevant units in and out of the country.

Nanjing Aeronautical Institute presently has specialized research organizations such as the unmanned plane research institute, aerodynamics research institute, vibrational strength research

office, air inlet research office, and the flight simulation and testing research office. There are 337 full time research personnel. The institute also has an audio visual teaching and research office. Among the scientific research equipment, it has a large computer, and high and low speed wind tunnels.

Since 1978, Nanjing Aeronautical Institute has intensified its academic exhange activities with the outside. It has retained 45 foreign experts and professors to lecture at the institute. In addition, the school has sent 35 experts, professors and students abroad to attend various academic activities and to study. This promotes the improvement of the quality of teaching and the level of research.

The institute presently edits ((Journal of Nanjing Aeronautical Institute)) and various special field teaching materials.

The library at the institute has a collection of over 490 thousand volumes, of which over 190 thousand books are in foreign languages. Moreover, it has over 2,900 periodicals.

The institute has an affiliated mechanical processing plant with 200 workers. In addition, it has a farm (with 580 acres of farmland), a school hospital (with 50 beds) and a kindergarten.

The institute occupies 800 acres of land (not including the farm). There are nearly 160 thousand square meters of building space. Presently, it is building two lecture halls.

In the 28 years since its founding, Nanjing Aeronautical Institute has trained over 13,500 people in the areas of aeronautical science and technology for our country. Among them, there have been 8,219 undergraduate students, 5,323 special students, and 24 graduate students. After working hard over a long period of time, the institute has created an outstanding spirit of "unity and hard work." The institute started very small and grew /132 to the present large scale. It was developed gradually. Presently, it possesses a team of faculty and staff members who are not only specialized but also politically aware of the situation. It owns a considerable amount of teaching equipment and scientific research means. It has already become one of the most important bases in developing higher level aeronautical science and technology personnel. Nanjing Aeronautical Institute is currently under the jurisdiction of the Third Mechanical Industry Ministry.

School Anniversary Date: October 20 Current President, Secretary of Party Committee: Wu Jizhou

# Huadong Engineering Institute

School Address: Xiaoling Wei, Nanjing, Jiangsu

The predecessor of Huadong Engineering Institute was the Artillery Engineering Institute of the Chinese Liberation Army. In 1960, it was formed by merging the artillery engineering department of Harbin Military Engineering Institute and Wuchang High Level Military Equipment and Technology School of the People's Liberation Army. The school site was originally in XiAn. In August 1962, it was moved to Nanjing.

In April 1966, Artillery Engineering Institute was changed to Huadong Engineering Institute.

Huadong Institute is a multi-disciplinary industrial institute. It primarily develops high level technical personnel for the modernization of the national defense industry.

After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Party Congress, Huadong Engineering Institute entered a new developmental era. According to the needs of the nation, some new special fields were offered. In 1977, it resumed accepting undergraduate students. Furthermore, it began to accept graduate students in 1978.

Huadong Engineering Institute presently has 7 departments first Mechanical Engineering department, second mechanical engineering department, chemical engineering department, electronic engineering and optoelectronics department, mechanical manufacturing technology department, computer and automatic control department, and industrial management engineering department. Under these departments, there are 23 special fields. Furthermore, there is 1 fundamental course division. As for the programs, with the exception that the industrial management engineering department is one year, the remaining departments and special fields are four years for the undergraduate and two years for graduate students. In 1980, the institute had 3,229 students in school, of which there were 2,959 undergraduate students, 98 special students, 105 advanced study students, and 67 graduate students.

The institute presently has 2,732 faculty and staff members, of which there are 1,032 teaching members. Among the faculty members, there are 7 professors, 24 associate professors, 691 lecturers, 37 teachers, and 273 assistants. The relatively famous experts and professors include Shen Zhengong, Yu Wendao, Xiao Xuezhong, Bao Tingyu, Pu Fa, Jin Jiajun, Feng Zhangang, etc.

In recent years, Huadong Engineering Institute has also obtained significant results in scientific research. In the 1978 National Scientific Meeting, 16 items received major scientific and technical accomplishment awards. In addition, 42 more items received major scientific and technical accomplishment awards in the province of Jiangsu. Presently, the institute has 4 research offices in the areas of non-electric measurement techniques, smoke and fire reagents, aerodynamics and powder explosive technology.

In recent years, Huadong Engineering Institute began to strengthen academic exchange activities in and out of the country. On one hand, it retains foreign and domestic scholars to teach at the institute on a part time basis, to guide or to participate in scientific research. On the other hand, teachers have been selected to go to foreign higher learning institutions and research organizations to study, investigate, and perform scientific research, or to attend academic meetings. Since its inception, certain accomplishments have been made in constructing laboratories. Presently, the entire institute has 37 laboratories. It owns an electronic computer, a nuclear magnetic resonator, an x-ray diffractometer, an infrared spectrophotometer, a liquid chromatograph, a high speed camera, an ultraviolet and visible light spectrophotometer, and wind tunnels. In addition, it has sets of color video recorders and special audio-visual classrooms.

The library at the institute presently has a collection of more than 370 thousand volumes of books, of which over 70 thousand are foreign books. In addition, there are more than 3,000 kinds of Chinese and foreign periodicals.

The institute edits and publishes two publications - ((Journal of Huadong Engineering Institute)) and ((Reference Material on Scientific and Technical Information)).

The institute runs an affiliated factory equipped to do 18 kinds of jobs, including machining, boring, planing, grinding, clamping, casting, forging, welding, carpentry, optics, radio, surface treatment, heat treatment, etc. It owns close to 400 pieces of various equipment. Under the condition that the tasks of teaching practices and research processing, it is capable of producing a small number of products such as optical instruments and radio testing instruments. The institute also has an affiliated printing shop and a farm. In addition, there are an affiliated high school, elementary school, kindergarten, and hospital.

The institute currently occupies 2,019 acres of land. There are nearly 220 thousand square meters of building space.

In over twenty years, Huadong Engineering Institute has trained a large number of undergraduate students and advanced students for our country and contributed to the modernization of our national In addition, it also trained a number of foreign students. defense.

Huadong Engineering Institute is presently under the jurisdiction of the Fifth Mechanical Industry Ministry.

School Anniversary Date: July 1st Current President, Secretary of Party Committee: Ming Lang /133

### China Mining Institute

22.232.242 | 24.202.242

5

#### School Address: Xuzhou, Jiangsu

China Mining Institute is the higher learning institution established very early by the coal industry system in our country.

The predecessor of China Mining Institute was Jiaozuo Engineering Institute, which was evolved from Jiaozuo Road and Mining School founded in March 1911. In April 1931, the road and mining school changed its name to Jiaozuo Engineering Institute. It had 2 disciplines - mining and metallurgy, and civil engineering. During the war against Japan, Jiaozuo Engineering Institute was relocated to XiAn and merged with schools including Beiyang University to become the Northwest Engineering Institute. After winning the anti-Japanese war, Jiaozuo Engineering Institute was reinstated. It was moved to Luoyang in Henan, Zhengzhou and Suzhou in Jiangsu. In 1949, it was moved back to Jiaozuo, Henan from Suzhou. Professor Zhang Qingtao was the president. It reinstated 3 departments - mining, metallurgy and mechanical en-395 gineering.

In the end of 1949, the Fuel Industry Ministry of the Central People's Government took over Jiaozuo Engineering Institute. In early 1950, the metallurgical department was transferred to Northeast Engineering Institute. In August 1950, the 4 departments in mining, civil engineering, mechanical engineering, and electrical engineering of Huabei Coal Mine Special School were merged into Jiaozuo Engineering Institute.

In September 1950, China Mining Institute was planned in Tianjin. Jiaozuo Engineering Institute was moved to Tianjin to begin the planning work for the founding of China Mining Institute. Back then, Chen You, who was a Chinese Communist Party Central Committee Member and the Minister of the Fuel Industry Ministry, was the part time president. Wu Zimu was the vice president, in charge of the day to day events of the institute. In August 1952, during the period in which all the schools and deaprtments in the higher learning institutions in the country were reorganized, the Central People's Government instructed the transfer of the entire mining department of Tangshan Engineering Institute and a part of the mining departments of Tianjin University (the original Beiyang University) and Qing Hua University to China Mining Institute. At the time, the number of faculty and staff members increased from 31 to 184. The number of students increased from 168 to 1,478.

In August 1953, China Mining Institute was moved to Beijing from Tianjin and its name was changed to Beijing Mining Institute. Wu Zimu was the president. Before the ten year period of chaos, the number of teachers at the institute was developed to 914. The special field offerings were developed to 5 departments and 13 special fields. In addition, there is 1 fundamental division and 1 old cadre special class. It has trained 14,111 college students and 137 graduate students for the country. It became one of the key universities in the country. From 1954, the institute began to accept foreign students and teachers for advanced training from Korea, Vietnam, Albania and Czechoslovakia. It had sent 6 teachers to Vietnam and Albania to undertake the task of / supporting foreign countries.

Beijing Mining Institute began to set up a correspondence division in 1956. It established 6 correspondence departments in various coal institutions and at Kailuan Coal Mine. Furthermore, 49 correspondence stations were set up in many large coal industries in the nation. A nationwide coal system correspondence network was established; the number of correspondence students reached 3,623.

During the ten year period of chaos, Beijing Mining Institute was seriously damaged. In May 1970, it was moved from Beijing to Sanhui Dam Commune in Hechuan County in Sichuan. Its school building was constructed on top of a wild mountain. Its name was changed to Sichuan Mining Institute. From 1966, it did not accept any students for 6 years. The work in teaching and scientific research was seriously distrupted. This key higher education institution was on the verge of collapse.

After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Party Congress, Sichuan Mining Institute obtained a new lease on life. In 1978, with the approval of the State Council, Sichuan Mining Institute was relocated to Xwzhou, Jiangsu. Furthermore, the name of the school was changed to China Mining Institute.

Since its founding, China Mining Institute has stressed the fact that theories must be correlated to realities in teaching. It seriously executes the educational policy of developing morality, wisdom, and body. A relatively good school spirit has been created. The students study hard. The teachers are serious and responsible. The teachers are respected and the students are loved. Teaching and learning are mutually helping each other. The disciplines are obeyed. The studying order is strictly maintained. Good traditions have already been developed. The cultural and athletic activities were very active. In 1958, it received the honorable name of a "national athletic activity red flag institution."

Since its inception, China Mining Institute not only developed a large number of socialist construction personnel for our country but also trained a high quality teaching team. Among them, there are older generation professors prior to the liberation as well as newly developed talents trained after the

liberation. Vice president, Professor He Jie had been the first chairman of the geology department at Beijing University which was founded by himself in the early years of the Republic of China. He was the chairman of the mining department at Beijing University, Jiaotong University, Tangshan Engineering Institute, and Chongqing University. He teaches rigorously and works very hard. He has trained several generations of personnel in the area of geology and mining for our country. Professor Deng Yuemo studied in the United States in his early years and returned to our country. He is particularly specialized in water pumps, lifting machines, metallurgical machines, and natural testing machines. In 1955, he was in charge of the design of the gate of the Sanjiadian Reservoir in Beijing. In 1959, he joined the inspection committee work for the People's Hall in Beijing. He has been invited to coal mines in Fuxino, Fushun and Kailuan to resolve major technical problems.

The research work at China Mining Institute also obtained certain results. Since 1955, it has completely 150 research subjects relatively well. Some of the accomplishments were praised by the Party and the Government. In the 1978 National Scientific Meeting, the results of 9 scientific projects of the institute received awards. In the scientific meeting in Sichuan and Chongqing, it received 10 scientific research accomplishment awards.

China Mining Institute presently has 7 departments and 16 special fields.

Mining Engineering Department Underground Coal Mining Special Field Open Mining Special Field Mine Construction Department Coal Mine Well Construction Special Field Coal Mine Industry and Civilian Building Special Field Coal Field Geology Department Coal Field Geology and Survey Special Field Coal Field Geophysical Survey Special Field Engineering Geology and Hydrological Geology Special Field Mine Measurement Special Field Mine Mechanical Engineering Department Mining Machine Design Special Field Coal Mine Machine Manufacturing and Repair Special Field Metallic Material and Heat Treatment Special Field Automation Engineering Department Coal Mine Electric Automation Special Field Electronic Computer Special Field

Coal Mine Industrial Management Department Coal Mine Industrial Management Engineering Special Field Coal Comprehensive Utilization Department Coal Selection Special Field Coal Comprehensive Utilization Special Field

The undergraduate program is temporarily determined to be four years. In addition, at the original site of Beijing Mining Institute, there is a graduate student department.

In 1980, China Mining Institute had 1,825 students and 114 graduate students. There were 2,423 faculty and staff members, of which 785 were teachers. Among the teaching staff, there were 20 professors, 74 associate professors, 519 lecturers, and 172 assistants.

The institute especially established research institutes and a technical information office to actively open up special topic research and to absorb advanced coal science and technology from other countries. The ((Journal of China Mining Institute)), which began publication in 1955, has already been reinstated.

In recent years, China Mining Institute has selected teachers to go abroad to attend international academic meetings or to study and investigate at higher learning institutions and research organizations. In the meantime, foreign scholars also arrived at the school to visit and lecture. China Mining Institute has retained 1 American Mining Engineering expert as an honorary professor. Furthermore, it began to exchange information with higher mining education institutions abroad. In these contacts, teaching and scientific research work have been promoted at the institute.

The institute has a collection of more than 510 thousand volumes, of which there are more than 380 thousand Chinese books and over 130 thousand foreign books. Of the earliest publications collected, it has the journal of American Institute of Mining Engineers (AIME) which started the first issue in 1871. The Russian coal publication " yrond " was collected since its first issue in 1925. This is rare in our country.

The institute has built 44 laboratories. In recent years, it has added some modern technological equipment such as the 450 thousand time magnification Japanese JEM-200CX electron microscope, stereo polarized light microscope, high temperature microscope, 200kW direct current power measuring apparatus, vortex power measurement apparatus, gear opening line detector, hobbing cutter inspecting apparatus, various precision instruments and electronic computers, gyro-theodolite, photographic theodolite, 2.5 million frame high speed camera, etc. In addition, there are sets of color video recorders and projection equipment.

The institute also operates a machine factory, a correspondence division, an employee dependent high school, a dependent elementary school, a kindergarten, and an affiliated school hospital.

The modern socialist university - China Mining Institute is presently located on the south of the huge and beautiful Huahai Monument. The entire group of buildings in the rebuilding area of the institute was designed according to the modern standard. It is symmetrical and natural, beautiful and great. The campus area under construction occupies 1,110 acres of land. The building space is approximately 200 thousand square meters.

China Mining Institute is presently under the jurisdiction of the Ministry of Coal Industry.

School Anniversary Date: May 1st Current President: Liu Ziguang Secretary of Party Committee: Zhang Xuewen Huadong Water Conservancy Institute

Constant Street and

School Address: Xikong Road, Nanjing, Jiangsu

Huadong Water Conservancy Institute was founded in 1952. It was the first scientific and engineering institute built after the liberation centered around water conservancy.

After the New China was founded, in order to suit the needs of the large scale development in water conservancy, hydroelectricity, and water transportation in the country, during the reorganization of the schools and departments in the higher learning institutions in the country in 1952, Huadong Water Conservancy Institute was founded on October 27 in the same year on the basis of the water conservancy departments (classes) from famous universities in the eastern China area such as Jiaotong University, Nanjing University, Zejiang University, and Tongji University. Back then, the vice ministers of the Water Conservancy and Electric Power Ministry Feng Zhongyuan and Qian Zhenying were presidents of the institute on a part time basis. China Academy of Science Committee member and harbor expert Yan Kai was the vice president.

During the period when Huadong Water Conservancy Institute was first founded, Professor Yan Kai was particularly concerned about retaining talents. He rigorously selected and retained people with true knowledge as teachers. Twenty-eight professors /136 and associate professors as well as teachers in other disciplines, such as Professor Huang Wenxi who is a water conservancy expert (member of China Academy of Sciences, later transferred to the Institute of Water Conservancy and Hydroelectric Power), Professor Xu Zilun who is an engineering mechanics expert, Professor Liu Guangwen who is a hydrologist, Professors Sha Yuqing and Zhang Shunong who are silt experts, Professor Gu Zhaoxun who is a hydraulic expert, Professor Wu Zhengcheng who is a hydraulic energy utilization expert, Professor Shi Chengxi who is a lake hydrologist, Professor Zheng Zhaojing who is an expert in Chinese Water Conservancy history, Professor Liang Yongkang who is a hydraulic power expert, and Professor Jiang Guobao who is a hydraulic machine expert, came to teach at the institute. They became the foundation of the teaching staff to build the institute. It had

a foundation laying effect on the teaching and research at the school.

When the institute was first built, Huadong Water Conservancy Institute offered the river department, hydrology department. water harbor department, and soil reform department. There were 4 special fields in construction of hydraulic structure of river pivots and hydroelectric stations (divided into hydraulic structure specialization and water energy utilization specialization), land hydrology, water channel and harbor, and water conservancy soil reform. After 1953, the water conservancy special fields from Xiamen University, Wuhan University and Shandong Agriculture Institute were merged into Huadang Water Conservancy Institute. In 1955, the water conservancy soil reform special field at Huadong Water Conservancy Institute was transferred to the newly founded Wuhan Water Conservancy and Electric Power Institute. In 1958. Huadong Water Conservancy Institute reinstated the farmland irrigation engineering special field. Furthermore, it offered newly established special fields in hydroelectric station power equipment and oceanic engineering hydrology. In 1959, with the approval of the Ministry of Hydroelectric Power, it established a survey design institute in Huadong Conservancy Institute to combine the tasks of graduate designs with the survey and design duties in irrigation, hydroelectric, and water transportation engineering projects. In 1960, the institute added 7 special fields in mathematics, physics, chemistry, mechanics, radio, automatic motion, and military harbor construction. The institute was further developed. From 1963 and 1964, it executed the reorganization policy of the Central Government and adjusted part of the special fields.

m

After the "Gang of Four" was crushed, in order to suit the need in socialist modernization, Huadong Water Conservancy Institure again added some special fields. Presently, the institute has 6 departments, 1 fundamental division and 11 special fields.

> River Pivot and Hydroelectric Station Construction Department Water Conservancy and Hydroelectric Engineering Construction Special Field Hydroelectric Station Power Equipment Special Field

Harbor Department

Harbor and Navigation Channel Engineering Special Field Oceanic Engineering Hydrology Special Field Farmland Irrigation Engineering Department

Farmland Irrigation Engineering Special Field Engineering Geology and Hydrological Geology Special Field Engineering Mechanics Department

Hydraulic Construction Mechanics Special Field Hydrology Department

Land Hydrology Special Field

Automation Department

Hydraulic Engineering Automation Special Field Industrial Automation Special Field Electronic Computer Application Special Field

The school also has 6 teacher training classes in mathematics, physics, fluid mechanics, engineering drafting, political theory and physical education. The above special fields are four years. The graduate programs are divided into 3 types - two years, three years and four years. In addition, Huadong Water Conservancy Institute also holds various advanced study classes, training classes, and correspondence classes, as well as periodically offers "Internation Hydrology Class" and "International Hydrology Training Class" for the World Meteorology Organization and the Development and Planning Council.

Huadong Water Conservancy Institute had 2,840 undergraduate students, 96 graduate students, and 28 foreign students in 1980. It currently has 1,474 faculty and staff members, in which 648 are teachers. Among the teachers, there are 20 professors, 44 associate professors, 352 lecturers, 107 teachers, and 125 assistants. In addition, there are 2 foreign experts. The large number of teachers developed after the liberation have already become the backbone force in teaching and research. Some of them have already become the leaders in their disciplines.

Hydraulic construction and water resources utilization is a comprehensive science. In the teaching aspect, Huadong Water Conservancy Institute has always been encouraging the overall development of students in morality, wisdom, and body. It attempts to expand the horizon of scientific research. It emphasizes the reinforcement of fundamental theories and the training in the basic knowledge of the special field and the basic

skills. It attempts to develop the students to have the capabilities of analyzing and resolving problems. It promotes the mutual discussion between the teachers and the students. It teaches according to the individual talent. The students trained by Huadong Water Conservancy Institute have a solid foundation, wide area of special field training, and high adaptability.

Huadong Water Conservancy Institute is an important strength in the study of sciences in water conservancy, hydroelectricity, and water transportation. According to the principle of concentrating on applied scientific and technological research and fundamental theoretical research at the same time, the school practices the policy of combining teachers with full time research personnel, combining full time research organizations with various departments and teaching and research offices, coordinating between all the disciplines, and associating with external organizations in opening up scientific research activities. The school has preliminary proposed scientific research tasks in 12 areas: (1) the study of the water basin of rainfall, (2) the study of environmental water conservancy and pollution hydraulics, (3) the problem of silt at coastal river mouths and river pivots and the study of the engineering measures, (4) the effect of complex foundation on the characteristics and type of concrete structures and the study of the reinforcing measures, (5) the study of earthquake resistance of hydraulic structures, (6) the study of high speed water flow problems with regard to hydraulic structures, (7) the study of technical problems involving the water conservancy at the Three Gorges, (8) the study of the water turbine motion process, (9) the study of fundamental farmland irrigation theory and its technical measures, (10) the application of electronic computers to water conservancy engineering, (11) the study of water conservancy system engineering (including water conservancy economics problems), and (12) the study of water conservancy measurement techniques and the automation technology. The institute undertakes 160-170 projects each year in scientific research for the water conservancy department, electric power department, transportation department, and relevant

organizations on the province and city levels, and has obtained many accomplishments. Since 1978 alone, it received 82 awards in the National Scientific Meeting. It was given 30 accomplishment awards by the Central Ministries and Committees as well as by the province and city. Among them, the scientific research results on projects such as ((The Study of the Earthquake Resistant Design of the Concrete Dam at Liujia Gorge)), ((The Effect of Longitudinal Cracks on the Working Characteristics of Concrete Gravity Dam)), ((Method to Predict Flood in Wetland Areas)), etc. had attracted a lot of attention in international academic meetings.

The scientific research organizations presently set up by the institute include: the water conservancy and hydroelectric science research institute, environmental water conservancy research institute, ocean and coastal engineering research institute, and technical information study office. Nanjing Hydrology Research Institute of the Ministry of Water Conservancy is also established in Huadong Water Conservancy Institute.

In recent years, the academic exchange activities between Huadong Water Conservancy Institute and the international community became more active. Many foreign experts and scholars arrived at the Institute to visit and lecture. The institute also selected experts, scientific research personnel, and teachers to go abroad to investigate, study, or to attend international academic activities. Huadong Water Conservancy Institute has established school to school relationships with related universities and academic organizations in the United States and West Germany.

The library of the institute presently has a collection of more than 400 thousand volumes of books, of which over 90 thousand books are in foreign languages. There are 1,444 periodicals. The total number of books, periodicals and date is more than 450 thousand. The library building area is more than 4,700 square meters. It has a book warehouse, special reading rooms for teachers, various student reading rooms, various periodical rooms, and data rooms which provide better learning conditions for the students and teachers.

The institute edits and publishes the technical journal - ((Journal of Huadong Water Conservancy Institute)).

The institute currently has 29 laboratories. In recent years, it has reinforced itself with a large number of instruments and /137 equipment to strengthen the teaching of experimental courses. The special field laboratories designed and installed a centrifuge, a reduced pressure box, and a gas erosion platform. The institute also added a large electronic computer, and built a labroatory of large scale hydraulic and harbor structures and a comprehensive harbor pond for waves and tides to be used for teaching and scientific research.

The school presently has a machine shop and a printing shop. In addition to serving teaching and scientific research, they also undertake some small amount of production work.

The school also has fringe benefit installations such as an affiliated school hospital and a kindergarten.

ومتبط بالمومين فرا

The institute presently occupies 545 acres of land. There are more than 110 thousand square meters of building space. In 1980, more than 31,000 square meters of basic construction projects were under construction.

Since its founding, under the leadership of the Party of the People's Government, Huadong Water Conservancy Institute has been gradually expanded in scale. The school affairs have been developed rapidly. The basic matching of various disciplines has been formed preliminarily. The special field offerings are relatively complete. It becomes a higher water conservancy institute which combines teaching, scientific research and production.

In 28 years, the school has developed 9,881 undergraduate students, and 89 graduate students for our country. In addition, it has trained 49 foreign students. Furthermore, it has also trained a large number of correspondence students, advanced study students, and short term training class students.

Huadong Water Conservancy Institute is currently under the jurisdiction of the Ministry of Water Conservancy.

/138

School Anniversary Date: October 27 Current President: Yan Yi Secretary of Party Committee: Hu Chang Zhenjiang Agricultural Machinery Institute

School Address: Zhenjiang, Jiangsu

Zhenjiang Agricultural Machinery Institute was founded in 1960. Its original name was Nanjiang Agricultural Machinery Institute.

In 1960, using the agricultural machinery special field and the motor vehicle and tractor special field at Nanjiang Engineering Institute as the foundation, Nanjiang Agricultural Machinery Institute was established. In 1961, the institute was moved to the east suburb of the city of Zhenjiang. Its name was changed to Zhenjiang Agricultural Machinery Institute. In 1963, the irrigation and drainage machinery special field and irrigation and drainage machinery research office of Jilin Polytech University were merged into Zhenjiang Agricultural Machinery Institute. In 1970, the Agricultural Machine Branch of Nanjiang Agriculture Institute was moved from Nanjiang to Zhenjiang to be merged into Zhenjiang Agricultural Machinery Institute. Zhenjiang Agricultural Machinery Institute was developed on the basis of these three parts.

In 1971, the jurisdiction of Zhenjiang Agricultural Machinery Institute was transferred from the Agricultural Machinery Ministry to the Province of Jiangsu. In 1977, it was again transferred under the leadership of the First Mechanical Industry Ministry. In 1979, the State Council restored the Agricultural Machinery Ministry. Zhenjiang Agricultural Machinery Institute was again placed under the jurisdiction of Ministry of Agricultural Machinery.

Between 1960 and 1966, Zhenjiang Agricultural Machinery Institute had 1 division and 3 departments such as the fundamental course teaching research division, the agricultural machinery department, the power machinery department, and the machine manufacturing department. It was divided into 6 special fields in the design and manufacture of agricultural machinery, the design and manufacture of tractors, the design and manufacture of motor vehicles, the design and manufacture of internal combustion engines, the design and manufacture of irrigation and drainage machinery, and machine manufacturing technology and equipment. The number of students reached 1,000.

407

/138

During the ten year period of chaos, Zhenjiang Agricultural Machinery Institute, as the other related institutions in the nation, was seriously destroyed by Lin Biao and the "Gang of Four." It stopped accepting students for 6 years. In 1972, it resumed recruiting. Until 1976, it had accepted 5 classes of students in three year programs.

Since 1977, Zhenjiang Agricultural Machinery Institute resumed accepting undergraduate students in four year programs. In 1978, it resumed accepting graduate students. The study periods are divided into three years and two years. In recent years, Zhenjiang Agricultural Machinery Institute also held national advanced study classes in agricultural machine testing techniques, irrigation and drainage machines, English and German, as well as an agricultural management cadre special class for the province of Jiangsu in order to suit the needs in the four modernizations.

Since 1978, Zhenjiang Agricultural Machinery Institute was reorganized and reformed its special field offerings. The institute presently has 5 departments, 1 division and 11 special fields.

A KUNUKU DANNANA I

Agricultural Machinery Engineering Department Agricultural Machine Design and Manufacture Special Field Tractor Design and Manufacture Special Field Motor Vehicle Design and Manufacture Special Field Power Machinery Engineering Department Internal Combustion Design and Manufacture Special Field Hydraulic Machine Design and Manufacture Special Field Machine Manufacturing Engineering Department Machine Manufacturing Engineering Department Field Casting Technology and Equipment Special Field Metallic Material and Thermal Treatment Special Field

Electrical Engineering Department

Industrial Electric Automation Special Field Agricultural Mechanization Department

Agricultural Machine Repair and Construction Special Field Agricultural Machine Management Engineering Special Field (three year special class) Fundamental Course Teaching Study Division

Zhenjiang Agricultural Machinery Institute has already become a higher engineering institution centered around agricultural mechanical sciences with offerings in mechanical and electrical engineering. The school faces the southern part of the country. It has already formed its own characterization in rice field agricultural machine, irrigation and drainage, and agricultural machine testing techniques.

Zhenjiang Agricultural Machinery Institute had 2,205 undergraduate students and 58 graduate students in 1980. It exceeded the number of students in school in 1966 by more than twice.

The institute presently has 1,181 faculty and staff members, of which 435 are full time teachers. Among the full time teaching staff, there are 6 professors, 14 associate professors, 282 lecturers, 9 teachers and 124 assistants.

The relatively famous professors and experts at the school include Wu Xiangang, Wu Qiya, Gao Liangrun, Jin Guangsheng, Qian Dinghua, etc. They are holding important positions in academic organizations in the Central and local government.

Zhenjiang Agricultural Machinery Institute also emphasizes scientific research work as it strengthens the teaching of fundamental theories. The present research organizations, with the exception of the irrigation and drainage machinery research office, include research offices in engineering mechanics, testing techniques, engineering thermal physics, etc. For over a decade, these research tasks for the province of Jiangsu, the Ministry of Agricultural Machinery, the Ministry of Water Conservancy, and the Ministry of Commerce obtained certain results. In the various science meetings on the national, provincial, and /139 city levels, it received 28 awards. Among them, the "study on the plough surface formed by inclined dynamic curves" was carried out in cooperation with related units. It used an analytical method to establish a mathematical model so that computers can be used to carry out the study of the design methods for designing plough surfaces. It is presently at an advanced level in the nation. The institute studied the cutting tool for a crop harvesting machine for both rice and wheat. It provided the scientific basis for the standardization of the cutting blade in our country.

Zhenjiang Agricultural Machinery Institute presently has 24 laboratories. Currently, it is capable of offering laboratory courses for fundamental courses, technical basic courses, and special field courses according to the outline of teaching.

Some of the laboratories, such as the material mechanics laboratory, agricultural machine laboratory, internal combustion engine laboratory, and motor vehicle laboratory, have relatively high levels. It also owns sets of electrical and optical measuring instruments, a holographic optical device, a plough force measuring frame, a plough surface optical plotter, various test stands for machines and pumps, a high speed camera, televisions and video recorders, etc.

The library of Zhenjiang Agricultural Machinery Institute possesses over 300 thousand volumes of books and journals. There are over 1,000 Chinese and foreign periodicals and more than 7,000 volumes of special field formation to provide a better condition for leaving and carrying out academic activities.

The institute edits and prints 4 publications - ((Journal of Zhenjiang Agricultural Machinery Institute)), ((Domestic Technical Information)), ((Foreign Technical Information)), and ((Engineering Reference Material in Japan)).

Zhenjiang Agricultural Machinery Institute has an affiliated mechanical processing plant which is considerable in size. It is equipped with cold and hot processing devices. It is closely coordinated with teaching and scientific research, as well as undertaking some production work.

67 ty

Zhenjiang Agricultural Machinery Institute occupies 750 acres of land. Currently, it has over 70 thousand square meters of building area.

In recent years, Zhenjiang Agricultural Machinery Institute in addition to retaining domestic and foreign scholars to lecture and to teach part time at the school, also has selected outstanding teachers, students, and graduate students to study in some higher learning institutions abroad as well as to attend international academic meetings. In addition, it has also received the academic groups and scholars from 12 countries to visit the school to promote friendship and exchange.

In 1980, Zhenjiang Agricultural Machinery Institute was entrusted by the environmental social committee of Asia and Pacific of the United Nations to hold an agricultural machinery training class which was participated by students from India,

Pakistan, the Philippines and Thailand. It had already been completed nct too long ago.

Since its founding in 1960, Zhenjiang Agricultural Machinery Institute has trained 4,130 high level agricultural machine technical people for our country (not including the 1,611 graduates from Nanjing Agricultural Mechanization Branch before 1970). It has contributed to the socialist career in our country.

Zhenjiang Agricultural Machinery Institute is presently under the jurisdiction of the Ministry of Agricultural Machinery.

Current President, Secretary of Party Committee:

Song Yaxin (acting)

Nanjing Meteorology Institute

School Address: Ponchengji, Pukou District, Nanjing, Jiangsu Nanjing Meteorology Institute was founded in May 1963. Its predecessor was the meteorology school of Nanjing University.

Nanjing University Meteorology School was founded in January 1960. At the time, it was directly under the jurisdiction of the Central Meteorological Bureau. It was controlled by the province of Jiangsu on an acting basis. In the fall of the same year, the school began to accept students. It had 4 special fields in weather and dynamic meteorology, atmospheric physics, climate, and agricultural meteorology (temporarily not accepting any students). The program was five years. Classes were temporarily held at Nanjing University.

In April 1961, Nanjing University Meteorology School founded two departments on the foundation of the original 4 special fields i.e., the department of meteorology and the department of agricultural meteorology. Under the meteorology department, there were two special fields in weather and dynamic meteorology, and atmospheric physics. Under the agricultural meteorology department, there were two special fields in agricultural meteorology and climate. In April 1962, the weather and dynamic meteorology special field merged with the atmospheric physics special field to become the meteorology special field.

In 1962, the school address of Nanjing University Meteorology School was assigned to be on the hill of Longwang Mountain, Panchengji, Pukou, Nanjing. In 1963, the meteorology school became independent. The name was determined to be Nanjing Meteorology Institute.

After Nanjing Meteorology Institute was founded, the number of students recruited continued to grow. Until the fall of 1965, the number of students had developed to around 800. Ev 1972, 6 more departments had been added.

During the ten-year period of chaos, especially after the Third Central Committee Meeting of the Eleventh Party Congress, Nanjing Meteorology Institute gradually restored its normal teaching order through correction of mistakes and reorganization. It has already marched on a track of healthy development.

Nanjing Meteorology Institute resumed accepting undergraduate students in 1977. The program for each special field has been changed to four years. In 1978, the school began to accept graduate students. Furthermore, it gradually added and reorganized special field offerings and founded a fundamental course division.

Nanjing Meteorology Institute presently has 3 departments, 5 special fields, and 1 fundamental course division.

> Meteorology Department Weather Dynamics Special Field Climate Special Field Agricultural Meteorology Department Agricultural Meteorology Special Field Atmospheric Physics Department Atmospheric Detection Special Field Atmospheric Physics Special Field Fundamental Course Division Mathematics Teacher Training Class Physics Teacher Training Class English Teacher Training Class

In 1980, there were 1,200 students in school. Among them, there were 1150 undergraduate students, 32 special students, and 8 graduate students. The institute presently has 526 faculty and staff members, of which 221 are full time teachers. Among the teaching staff, there are 3 professors, 2 associate professors, 104 lecturers, 62 teachers, and 50 assistants. The experts and professors at the institute who have a certain influencing effect on the meteorological discipline in our country include ZhangJijia, Feng Xiuzao, Wang Pangfai, Gu Junxi, etc.

/140

The scientific research work at Nanjing Meteorolgy Institute has made relatively larger progresses in recent years. The school undertakes more than 50 key scientific projects and topics for our country as well as for the meteorological departments. Encouraging results have been obtained in projects such as the study of atmosphere circulation and the intermediate and long range forecasting of weather, the research on torrential rainstorm, the study of the utilization of agricultural meteorological data, and the study of meteorological conditions for the growth of hybrid rice. In the 1978 National Scientific Meeting, the institute received 11 scientific awards (including projects carried out together with other units) for projects such as "low altitude jet stream and torrential rainstorm" and "study of the long term evolution pattern of the atmospheric circulation in the northern hemisphere and its application in the long range prediction of rain fall." The institute also received 8 major scientific research accomplishment awards from the province of Jiangsu in 1978 and 1979 for its work done in projects such as the "qualitative analysis of ultra-long wave activation patterns" and "physical parameters in the determination of rain fall amount by radar."

Nanjing Meteorology Institute presently has 3 research laboratories in climate and weather, agricultural meteorology, and atmospheric physics. There are 18 full time research personnel in total. It has 24 special field laboratories (including experimental stands and agricultural test stations). The major equipment primarily includes a DJS-6 electronic computer, a 701 wind measuring radar, a 711 rain measuring radar, a polar orbit satellite cloud pattern receiving device, a synchronous satellite cloud pattern receiving device, an artificial climate box, a one-way receiver, and a shielded room.

Currently, the library has a collection of over 200 thousand volumes of books, together with more than 800 Chinese and foreign periodicals.

The publication edited and published by the institute is ((Journal of Nanjing Meteorological Institute)) (semi-annually).

Nanjing Meteorological Institute occupies 225 acres of land. The present building space is 40 thousand square meters.

In the past twenty years, Nanjing Meteorology Institute has developed and transferred 1,863 undergraduate students to the meteorological departments in the military, in national defense, institutions, and on various provincial and city levels. It has trained 2,875 personnel on duty. Many of them have already become the backbone strength in the faculty team in institutions, in weather stations, and in scientific research organizations. They have obtained significant results in their work.

In recent years, Nanjing Meteorology Institute began to proceed with exchange activities with foreign scholars. The school invited foreign scholars to lecture and visit the institute. In the meantime, it has sent teachers to foreign schools and research organizations to study and investigate, as well as to attend academic meetings. Since 1980, it began to select and send students to study abroad.

Nanjing Meteorology Institute is presently under the jurisdiction of the Central Meteorological Bureau.

School Anniversary Date: May 14th Current President: Luo Han Secretary of Party Committee: Luo Ming

# Nanjing Agriculture Institute

School Address: Wei Hill, Nanjing, Jiangsu

Nanjing Agriculture Institute was founded when the schools and departments of the higher learning institutions in the country were reorganized in 1952. Its predecessor was the agriculture school of Nanjing University (the previous Central University before the liberation which was founded in 1914), and the agriculture school of Jinling University (which was founded in 1913). Due to the fact that the school has a relatively long history, many of the older generation agricultural scientists in our country went to these two schools. Many famous professors have been working here for long periods of time.

/141

The school was originally located in the city of Nanjing. In 1958, it was moved to the current site on Wei Hill on the eastern suburb of Nanjing. Furthermore, it established a branch institute in agricultural mechanization in Puzhen. In 1965, Nanjing Agriculture Institute had already reached a preliminary scale. The campus on Wei Hill had 6 major buildings as well as the living quarters for students and faculty. It owns facilities such as a practice farm, a livestock farm, a veterinary hospital, and greenhouses, which basically are capable of satisfying the needs in teaching and research. Back then, the institute had 89 laboratories. The library collected 500 thousand volumes of books. There were more than 500 faculty members, and 2,500 students. Furthermore, it was accepting graduate students and became one of the agricultural institutions which have better foundations.

From its founding in 1952 until 1966, Nanjing Agriculture Institute had developed nearly ten thousand college graduates, graduate students, and advanced study students for our country. Furthermore, it had accepted foreign students. Its graduates were distributed all over the country and became the backbone strength in the agricultural administration and business units at various levels. Many people have made significant accomplishments and were welcome and considered highly by the Government and the people. For example, Liu Shouren, who was a 1955 graduate of the livestock farming special field, had made a significant contribution in the improvement of the breeding of fine wool lamb in Xinjiang. Seven agriculture department graduates in 1957, including Hu Jialu, have been staying at Beidahuang and they worked very hard to build a new career. Their accomplishments have been outstanding and they were praised by the people. Zhang Yan (female) who was a 1959 agriculture department graduate (currently working at Shanghai Agricultural Science Institute), and Yu Jingzhong who was a 1961 agriculture department graduate (currently working as the chief of the cotton seed plant in Siyang Jiangsu) have been outstanding in scientific research. They were selected as the representatives of the Fifth People's Congress.

In the area of scientific research, Nanjing Agriculture Institute had carried out 335 research projects between 1952 and 1966. There were 100 projects with accomplishments.

For example, they included the breeding of wheat in the two harvesting areas in the middle and low stream of Yantze River, the study of the prevention of the white leaf withering of rice, the study of the prevention of asthma of hogs, and the study of rational structure and the moving mechanism of tractors. The attainment of these research results had a certain contribution to agricultural production. It also enriched the content of teaching and improved the quality of teaching.

During the ten years of chaos, Nanjing Agriculture Institute was abolished and merged into Subei Agriculture Institute. The name was changed to Jiangsu Agriculture Institute. All the land and buildings of Nanjing Agriculture Institute were distributed to other units for use.

After the "Gang of Four" was crushed, the State Council approved the reinstatement of Nanjing Agriculture Institute in 1979. It was moved back to the original site on Wei Hill, Nanjing. The original teachers mostly returned to the school. The original equipment and books were basically preserved. The school buildings, land, the practice farms and livestock farm were in the process of gradually being recovered. The agricultural mechanization branch of the institute has already been merged into Zhenjiang Agricultural Machinery Institute. It is no longer included in the Nanjing Agriculture Institute system. Currently the institute is facing many difficulties in its operation. However, the entire faculty and students are full of enthusiasm. They are actively contributing to the restoration and development of Nanjing Agriculture Institute.

1220

Nanjing Agriculture Institute currently has 7 departments and 9 special fields.

Agriculture Department Agriculture Special Field Crop Breeding Special Field Plant Protection Department Plant Protection Special Field Soil and Agricultural Chemistry Department Soil and Agricultural Chemistry Special Field Horticulture Department Fruit Tree Special Field Vegetable Special Field

Livestock Framing and Veterinary Department Livestock Farming Special Field Veterinary Medicine Special Field Agricultural Economics Department Agricultural Economics and Management Special Field Fundamental Courses Department

The programs are four years for all the other special fields except for the veterinary medicine special field which is four years. The 5 departments in the institute - agriculture, plant protection, soil and agricultural chemistry, livestock farming and veterinary medicine, and agricultural economics, have resumed accepting graduate students. The learn periods are divided into two types - three years and two years.

In 1980, there were 1,100 undergraduate students and 54 graduate students at Nanjing Agriculture Institute. There were 950 faculty and staff members, of which 463 were full time teachers. Among the full time teachers, there were 26 professors, 57 associate professors, 219 lecturers, 108 teachers and 53 assistants.

On the basis of summarizing the past scientific research work, Nanjing Agriculture Institute is actively encouraging teachers and students to participate in scientific research in order to work hard to be creative. In the 1978 National Scientific Meeting, the "study of the fungus and the identification of the fungus responsible for the white leaf withering disease of rice" and "Nanla 2419 Wheat" received two awards. In 1979, the institute received 10 awards in which "Classification of Chinese Worms and Winged Insects" received a technical improvement award from the Agriculture Ministry. Projects such as "the migration pattern of snout moth's larva," and "livestock digestive physiology" received technical awards from the province of Jiangsu. In 1980, the institute had 15 projects, such as "wheat white stem disease," "Tibbet crops," and "breeding of short cabbage," which received technical improvement awards from the Agriculture Ministry and technical awards from the province of Jiangsu.

In recent years, in order to improve the standards in teaching and academics, Nanjing Agriculture Institute on one hand has retained scholars from in and out of the country to lecture, and to lead and participate in scientific research, and on the other hand has selected and sent teachers to study and investigate at foreign higher learning institutions and research organizations, as well as to attend academic meetings. The institute also established academic exchange relations with universities in the United States. /142

Presently, Nanjing Agriculture Institute has research offices in soy bean breeding, agricultural microorganism plant disease protist, livestock physiology, wheat breeding, agricultural insectology, weeds, agricultural ecology, livestock communicative disease, agricultural technology and economics, and agricultural educational history, to undertake the research tasks given by the Central Agriculture Ministry, China Agricultural Science Institute and related departments and bureaus in the province of Jiangsu.

The library at the institute currently has 300 thousand volumes of books and more than 4,800 periodicals. There are a total of over 500 volumes of books, periodicals and data. Presently, it is constructing a new library building 8000 square meters in size. The building is equipped with various student reading rooms, special reading rooms for the teachers and lecture rooms. They will provide a good condition for learning and carrying out academic activities.

The entire institute presently has 45 laboratories. In addition to the ordinary instruments and equipment, the institute is gradually purchasing some relatively advanced equipment.

The institute occupies 815 acreas of land. It has over 90 thousand square meters of building space.

Nanjing Agriculture Institute is presently under the jurisdiction of the Ministry of Agriculture.

School Anniversary Date: October 20 Current President, Secretary of Party Committee: Li Li



Zhejiang Province

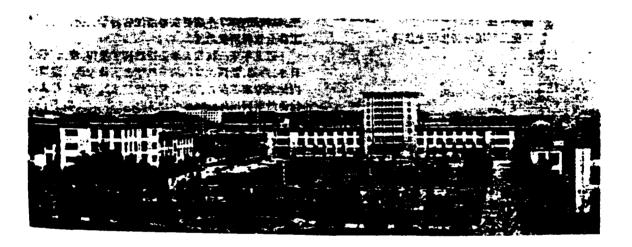
Hangzhou University

School Address: Tianmushan Road, Hangzhou, Zhejiang Hangzhou University is a comprehensive university with many disciplines, which belongs to the province of Zhejiang. The school is located in Hangzhou, Zhejiang. It is situated on the side of the beautiful West Lake.

The predecessor of Hanzhou University was Zhejiang University School of Arts and Sciences, which was founded in August 1928. Mr. Shao Paizi was the first dean. When it was first established, the school of arts and sciences had 10 disciplines in Chinese, foreign languages, philosophy, mathematics, physics, chemistry, psychology, history and politics, physical education, and military affairs. In 1929, the disciplines were changed to departments. Furthermore, it added the department of history, department of economics, and department of education. In 1938, Zhejiang University formed its own normal school. In 1939, the school of arts and sciences was broken into the school of arts and the school of science.

Zhejiang University School of Arts and Sciences had been concerned with hiring knowledgeable scholars since its inception. Famous scholars such as Meng Xiancheng, Chen Jiangong, Subuqing, Bei Shizhang, Tang Jiazhen, Wang Gangchang, and Zheng Xiolun had taught at one time and another at the school of arts and sciences. During the period when Zhu Kezhen was in charge of Zhejiang University, he was trying very hard to gather talents from all areas. The teaching and research strength at the school of arts and sciences was even more powerful.

Zhejiang University School of Arts and Sciences had always been concerned with teaching and research work. Persistent Zhu Kezhen promoted that a university should "study the academics rigorously" to "develop knowledgeable and honest scholars." Dean Shao Paizi was waging the concept that a university education should develop "gentlemen." Even in the difficult environment in the eight year war against Japan, when it was moved westward through Jiangxi, Quangxi, to Guizhan and changed four places, the school still insisted on teaching and research. Due to the level of persons trained and the accomplishments in scientific research, it had a relatively high reputation in the the country back then.



One of the scenes at Hangzhou University

Before our liberation, under the influence and leadership of the Chinese Communist Party, the progressive faculty and students of Zhejiang University School of Arts and Sciences, together with the progressive faculty and students of the entire school, actively participated in the "September 18th" anti-Japanese Campaign, the "December 9th" student movement, the activities to resist the Japanese to save the country, the campaign against Kong (Xiangxi), the struggle to protest the killing of Professor Fei Gong by Nationalist Party agents, the campaign in support of the "December 1st" incident, the movement against the brutality of the American Soldiers, the "anti-hunger, anti-civil war, anti-suppression" movement, and the struggle due to the Yu Zisan incident.

Hangzhou was liberated on May 3, 1949. Zhejiang University obtained a new lease on life. At the time, there were more than 180 faculty members in the 3 schools in arts, sciences and teaching. There were over 300 students. When the schools and departments of higher learning institutions were reorganized in 1952, Zhejiang Normal Institute was established using Zhejiang University School of Arts and Zhejiang University School of Science (a part of it) as the foundation and by merging Zijiang University School of Arts and Sciences, Zhejiang Normal Special School, and Russian Special School into it. At the time, there were 114 faculty members and 732 students.

In November 1958, Zhejiang Normal Institute was merged into Hangzhou University (newly founded in August 1958). It was named Hangzhou University. It had 11 departments in Chinese, history, foreign languages, news, education, politics, mathematics, physics, chemistry, biology and geography. There were 866 faculty and staff members, and 3,572 students. Li Hujia was the president on a part time basis. In 1965, Zhejiang Normal Institute was again built separately and moved to Jinhua. The physical education department of the institute (originally in the system of Zhejiang Athletic Institute) was transferred into Hangzhou University. In 1972, Hangzhou Foreign Language Special School was merged into Hangzhou University. Until then, the system of Hangzhou University became stabilized. It showed the present scale.

After going through construction and development for around /144 thirty years (in which serious damages were encountered during the ten year period of chaos), Hangzhou University has established certain foundations in the offering of special fields, the strength in the teaching staff, and in books and equipment. Hangzhou University currently has 14 departments, with 24 special fields under them, There are 3 special classes. The school program is four years for the undergraduate students and three years for special class students.

> Philosophy Department Philosophy Special Field Economics Department Tourism Economics Special Field Political Economics Special Field Economical Management Special Field Law Department Law Special Field Chinese Language and Literature Department Chinese Language and Literature Special Field Chinese Special Class Foreign Language Department English Special Field German Special Field Japanese Special Field Russian Special Field History Department History Special Field Education Department School Education Special Field Psychology Department Educational Psychology Special Field Industrial Psychology Special Field Mathematics Department Mathematics Special Field Computation Mathematics Special Field Physics Department Physics Special Field Electronic Technology Special Field Chemistry Department Chemistry Special Field Industrial and Environmental Analytical Chemistry Special Class **Biology** Department **Biology Special Field** Geography Department Geography Special Field Economic Geography (city planning) Special Field Ocean Geology and Geomorphology Special Field Meteorology Special Field Physical Education Department Physical Education Special Field

Among the present special fields at Hangzhou University, 6 fields including tourism economics, English, German, Ocean Geology and Geomorphology, meteorology, and economics geography (city planning), accept and distribute students nationwide or in the eastern China area.

Hangzhou University currently has 7 research organizations such as the biological science research institute, Chinese language research office, Son Dynasty history research office, French history research office, psychology research office, catalysis research office, and fluorescent display research office.

In 1980, Hangzhou University had 5,074 students in school: 150 graduate students and 4,924 undergraduate and special students. The size of the students had already reached the highest level since we were liberated. Currently, there are 2,022 faculty and staff members, of which 987 are full time teachers. Among the full time faculty members, there are 21 professors, 50 associate professors, 625 lecturers, 66 teachers and 225 assistants. The number of faculty members above the lecturers' level has already reached 63.3% of the total number. A teaching team with a certain capability in teaching and research has already been created.

Hangzhou University has a certain reputation and influence in some special fields and disciplines under the promotion of some experts and scholars. Under the guidance of the famous psychologist Professor Chen Li, the research in the area of industrial psychology at the school is relatively more concentrated in our country. The famous mathematician, the late vice president Professor Chen Jiangong had worked on the study of mathematics and the teaching of mathematics at Hangzhou University over a long period of time. He had made contributions to the resolution of theoretical problems in the area of functional theory, trignometric series, single blade function, and functional approximation. Under the careful development and guidance of Professor Chen Jiangong, the study of functional theory in the mathematics department has always been one of the key research bases in functional theory in our country. Experts such as Jiang Liangfu, Wang Jiawu, and Xia Chengxi had taught in the Chinese department at one time or another. The department has a relatively solid foundation in the teaching and research of ancient literature and ancient Chinese. Especially in the study

of pre-Qin Dynasty literature, phonology, poetry in Tang and Song Dynasties, and classical documents, it has relatively good reputation in the country. Currently, it is in charge of editing the pre-Qin Dynasty part of an encyclopedia. The research strength is concentrated on Song history and French history in the history department. The chief of the French history research office, Professor Shen Lianzhi is the honorary chairman of the Chinese French History Study Society. Professor Wang Chengxu of the education department is a comparative education expert in the country. He is currently a consultant to the Asian area collaboration committee of the Organization of Science and Arts of the United Nations. Professor Chen Xuexun is a famous scholar in the study of Chinese education history. He is currently in charge of the editing of teaching materials such as ((Chinese Modern History in Education.)) Professor Dong Yumao has obtained certain accomplishments in the study of crustaceans. He is currently in charge of the writing and editing of part of the work in ((China Animal Log)) and an encyclopedia. After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Party Congress, Hangzhou University obtained quite a few accomplishments in scientific research. In the 1978 National Scientific Meeting, 7 projects such as the super large plasma display system developed by the university, the fluorescent numerical tube, the o-ditoluene ammonium oxidation catalyst, the lichen red, and a highly accurate calculation in the design process of a filter, obtained scientific research accomplishment awards. In the past three years, the school also has 23 items receiving scientific research awards in Zhejiang Scientific Meeting and Provincial Scientific Research Work Meeting.

In recent years, Hangzhou University has invited some scholars from countries such as the United States, Australia, Japan, West Germany, and New Zealand to teach at the university. It has invited famous experts in our country such as Su Buqing, Cao Yu, Deng Guangming, etc. to lecture at the university. Furthermore, it has selected outstanding teachers to study at higher learning institutions and research organizations abroad.

It has received the 1,029 representatives and individual scholars from foreign universities, research organizations, and academic groups who visited and lectured at the school. This promoted the academic exchange between countries and improved the academic standard of the school.

Hangzhou University presently has a collection of over 880 thousand volumes of books, of which there are nearly 160 thousand foreign books. Furthermore, there are 950 volumes of periodicals and 30 volumes of newspaper. The school also edits and publishes publications such as ((Journal of Hangzhou University)) and ((The Language Line)). They are distributed in and out of the country.

Hangzhou University has affiliated organizations such as a teaching instrument plant, a printing plant, an employee part time evening college, an employee part time school, a nursery, and a hospital.

Hangzhou University occupies 474 acres of land. Presently /145 it has close to 140 thousand square meters of building space.

In the 30 years since we were liberated, Hangzhou University has already trained 16,685 high level special people for the country (in which there are 16,608 undergraduate and special students, and 77 graduate students). It is 13.5 times the 1,237 graduates developed by the former Zhejiang University by the 3 schools of arts, sciences, and teaching in 21 years.

Hangzhou University is presently under the leadership of the People's Government of Zhejiang.

Current President: Chen Li

Secretary of Party Committee: Huang Yibing

Zhejiang University

• • •

School Address: Hangzhou, Zhejiang

The predecessor of Zhejiang University was Qiushi College, which was founded in 1897. It was located at Puci Temple in Puchang Lane, Hangzhou. The governor of Hangzhou Lin Qi was the superintendent. The first batch of students recruited was 30.

Qiushi College was one of the modern general institutes founded by ourselves in the early years. In the course offerings, with the exception of required courses such as mathematics,

physics, chemistry, and English, there were electives. As for the teaching method, "the emphasis was placed on initiation rather than memorization." Students were required to learn on their own. The questions were answered by teachers. Furthermore, it was concerned with the learning of advanced foreign scientific technology. Since 1898, it began to send students to study in Japan. The democratic revolutionary idea was very active at Qiushi College. Its first class alumnus Zhang Bingling ran ((The People's Paper)) in Toyko, Japan to promote the democratic revolution idea to oppose the imperial system of Qing Dynasty. It has a great effect on the revolution taking place in 1911. After the Wuchang Campaign in 1911, those who responded first in Zhejiang were also alumni of Qiushi College. Hence, the founding of Qiushi College not only has an important position in modern Chinese education history and new education history in Zhejiang, but also has a certain effect on the nationalist revolutionary campaign in our country.

Qiushi College was changed to Zhejiang Qiushi College in 1901. In 1902, it was changed to Zhejiang College. In 1903, it was changed to Zhejiang Higher School. In 1912, its name was changed to Zhejiang Higher School. After 1914, because the school system was reformed, it was terminated for awhile. In 1927, under the recommendation of people such as Cai Yuanpai, Zhejiang Industrial Special School and Agricultural Special School were reorganized as the engineering school and the agriculture school, respectively. They were combined into the National Third Zongshan University. In 1928, it was officially named as the National Zhejiang University. In the same year, it added the school of arts and sciences.



The teaching area at Zhejiang University

••••

After the anti-Japanese war erupted, the patriotic faculty, staff, and students of Zhejiang University, under the influence of the ten outlines of the Chinese Communist Party to resist the Japanese to save our country, moved out of Hangzhou going westward in November 1937 with a fearless spirit. They traveled through Jiante in Zhejiang, Jian and Taihe in Jiangxi, and Yishan in Guangxi for five thousand miles. In February, 1940, they arrived in Guizhou. The school was located in three places - Zuyi, Meitang and Yangxing. In the same time, abranch campus was established in Longquan in Zhejiang. After the anti-Japanese war was won, Zhejiang University was moved back to Hangzhou in the fall of 1946.

Between 1936 and 1949, it was an important period for the development of Zhejiang University. During this period, the famous geographic meteorologist Zhu Kezhen was the president. He used the two words "finding truth" as the school motto. He asked the students to work, after they graduated, to contribute their own knowledge and skill to our nation "without seeking for high positions and large salaries and not to be afraid of difficulty and far away places." Some famous scholars in the country

gradually came to teach at the school. The study style was rigorous and realistic. The school had a relatively good reputation.

During the anti-Japanese war period, although the school was drifting in difficulties, the funding was lacking, the equipment was very crude, the students, faculty, and staff were living with difficulty, the teaching and research work of the school never stopped. When they moved to a place, they "quickly settled down and began classes right away. In the siren (air raid) sound, or in small caves or in the field, they still talked about and studied courses to complete their work." As soon as the experimental instruments were shipped in, the boxes were opened immediately. Civilian buildings or temples were used to carry out the preparation work over night to rapidly offer the experimental courses. It fully demonstrated the hard working and realistic school style.

Since the "September 18th" incident occurred in 1931, especi-/146 ally since the beginning of the war against Japan to the eve of our liberation, under the influence and guidance of the Chinese Communist Party, the patriotic faculty and students of Zhejiang University had never stopped their struggle against imperialism and the nationalist reactionary group. They had first published the "declaration of democratic government" in 1945 and organized a national student union. In 1946, Professor Fai Gong of political economics was assassinated by the nationalist reactionaries because he openly commented on the fascist rule of the Nationalist Government. During the suppression of the struggle of the revolutionary crowd to oppose hunger, civil war, and oppression by the nationalist reactionaries, Zhejiang University student Union President Yu Zisan was killed. This incident further triggered a new climax in the national student movement. The patriotic students and faculty of Zhejiang University used their own activities to write a glorious page in the revolutionary history. Because of that, it had won the title of a "democratic fortress."

Before the liberation, the revolutionary faculty and students of the Zhejiang University began the struggle to protect the school under the leadership of the underground organization of

the Chinese Communist Party. They crushed the attempt of the nationalist reactionaries to move the Zhejiang University to Taiwan. The school was completely preserved.

On May 3, 1949, Hangzhou was liberated. Zhejiang University began a new voyage. Back then, Zhejiang University had already been developed into a comprehensive university with 7 schools in arts, science, engineering, agriculture, medicine, law and teaching. There were 26 departments in Chinese, foreign language, philosophy, humanity, history and geography, mathematics, physics, chemistry, biology, pharmacy, electrical engineering, chemical engineering, civil engineering, mechanical engineering, aeronautical engineering, agriculture, horticulture, agricultural chemistry, plant insect and disease, agricultural economics, forestry, silkworm and mulberry, livestock and veterinary medicine, medicine, education, law, etc. In addition, there were 10 research institutes in mathematics, physics, chemistry, biology, humanity, chemical engineering, history and geography, Chinese literature, education and agricultural economics. There were 1,661 students in school. The teaching team strength was relatively deep. of the 401 teachers, there were 148 professors, 69 associate professors, and 60 lecturers. Those who were later selected as the members of the academy of sciences included 12 people - Su Buging, Chen Jiangong, Wang Ganchang, Lu Jiaxi, Bai Shizhang, Luo Zongluo, Zhang Zhaogian, Zhu Kezhen, Tu Changwang, Huang Bingxiang, Cai Banghua, and Qian Lingxi. It is one of the universities with the most Academy of Science Members.

When all the schools and departments in higher education institutions were reorganized in 1952, parts of the mathematics department, physics department, and the chemistry department, as well as the anthropology department in the original school of science were transferred to Fudan University. Other parts of the mathematics department and physics department were transferred to Huadong Normal University. The pharmacy department was transferred to Shanghai Institute of Pharmacy. The forestry department in the original school of agriculture was transferred to Dongbei Institute

of Forestry and Harbin Institute of Forestry. The livestock farming and veterinary medicine department was transferred to Nanjing Agriculture Institute. A part of the agricultural chemistry department was moved to the food industry department at Nanjing Engineering Institute. The aeronatuical engineering department was transferred to Huadong Aeronautics Institute. The water conservancy group in the civil engineering department was transferred to Huadong Water Conservancy Institute. The history and geography department in the original school of arts was divided into the history department and geography department. The geography department was placed under the jurisdiction of the school of science. In the meantime, the faculty and students of the law school were gradually transferred to Beijing University.

After the reorganization, a portion of the school of arts and school of science of Zhejiang University, Zhejiang Normal Special School, and the school of arts and science of Zhejiang University were consolidated to become Zhejiang Normal Institute. Later, it was developed into the Hangzhou University of today. The school of agriculture was separated from Zhejiang University to establish the Zhejiang Agriculture Institute. Later, it was developed into today's Zhejiang Agriculture University. The medical school was merged with Zhejiang Provincial Medical Special School to become Zhejiang Medical School. Later on, it was developed into today's Zhejiang Medical University. Zhejiang University became a multidisciplinary industrial university using the four departments of electrical engineering, chemical engineering, civil engineering, and mechanical engineering in the original school of engineering and a portion of the school of science as the foundation with the addition of the departments of civil engineering and mechanical engineering of Zhejiang University, and portions of the 3 departments of electrical engineering, civil engineering, and mechanical engineering of Xiameng University. At the same time as the reorganization of schools and departments, a large number of faculty members from Zhejiang University were transferred to Chinese Academy of Sciences to participate in the planning and development of the Academy and its affiliated research institutes.

In 1957, Zhejiang University re-established the mathematics department and physics department. In 1958, the mathematics department was expanded into the mathematics and mechanics department. In addition, it added the chemistry department. It became a multi-disciplinary university in science and engineering. Later, it added the radio department, and the geology department. Furthermore, the optical instrument special field was expanded into the optical instrument department. The school began to accept graduate students in 1961. At one time or another, there have been nearly one hundred students from Albania, Korea, and Vietnam. Until 1965, the entire school had 10 departments and 35 special fields. The number of students at the school reached over 6,700. There were more than 1,400 full time faculty members.

The ten year period of chaos caused serious damage to the various aspects of work at Zhejiang University. After the "Gang of Four" was crushed in 1976, especially after the Third Central Committee Meeting of the Eleventh Party Congress, the orders in teaching and research at the school had been rapidly restored through reorganization and correction. The work in various areas was gradually returned to the right trade. After the higher education institutions in the entire country began to hold a unified entrance examination in 1977, the school has been emphasizing the teaching of fundamental courses. It expanded and reinforced the key laboratory courses for fundamental subjects. In 1978, departments and special fields were re-organized. It began to try out the credit system and resumed accepting graduate students.

Zhejiang University curently has 15 departments, of which there are 5 scientific departments without further division into any special field, and 10 engineering departments with 29 special fields. In addition, there is a special field in industrial management (presently only accepting graduate students). As for the study program, with the exception that it is five years for the biology and medical instrument special fields, it is four years for the other special fields.

Mathematics Department Physics Department Chemistry Department Mechanics Department Geology Department Electrical Engineering Department Electrical Engineering Special Field Industrial Electronic Technology Special Field Industrial Automatic Control Special Field Electric Power System and Automation Special Field Chemical Engineering Department Chemical Engineering Special Field Petroleum Chemical Engineering Special Field Polymer Chemical Engineering Special Field Chemical Engineering Automation Special Field Chemical Engineering Machinery Special Field Civil Engineering Department Architecture Special Field Construction Structure Engineering Special Field Hydraulic Engineering Special Field Mechanical Engineering Department Precision Machinery Engineering Special Field Hydraulic Transmission and Control Special Field Radio Electronic Engineering Department Radio Technology Special Field Electronic Physics and Technology Special Field Semiconductor Device Special Field Optical Insturment Engineering Department Optical Instrument Special Field br.7 /147 Laser Technology Special Field Photographic Instrument and Engineering Special Field Materials Science and Engineering Department Metallic Materials Science and Engineering Special Field Inorganic Materials Science and Engineering Special Field Thermal Physics and Engineering Department Internal Combustion Engine Engineering Special Field Electric Power Plant Thermal Energy Special Field Low Temperature Engineering Special Field Scientific Experimental Instrument Engineering Department Testing Technology and Automation Instrument Special Field Computer Science and Engineering Department Electronic Computer Special Field Computer Software Special Field

In addition, there is the special field in scientific organization, planning and management.

Zhejiang University had 6,987 students in school in 1980. Among them, there were 6,736 undergraduate students and 251 graduate students. The entire school had 4,148 faculty and staff members, of which 1,832 were teachers. Among the teaching staff, there were 257 professors and associate professors and 1,079 lecturers. In the aspect of scientific research, the school has 4 research institutes in optical instrument, chemical engineering, electrical engineering technology, and material engineering. In addition, it has 6 research offices in mathematics, physics, chemistry, explosion mechanics, precision machinery, architectural structure and design. They undertake the scientific research duties for over 10 departments and committees in the Academy of Sciences, Zhejiang Province and the State Council.

On the basis of inheriting the outstanding tradition of the old Zhejiang University "to be realistic and to work hard," the school has been actively encouraging teachers and students to be creative. Many elder professors such as Yang Silin, Zhou Chuahui, Wang Qidong, Wang Rendong, Zeng Guoxi, Hou Yujun, Chen Yunxian, etc. are still active in the front line of teaching and research. They are effective academic leaders. The young and middle aged teachers are developing rapidly. Some of them have made significant accomplishments in teaching and scientific research. In 1958, the large gas turbine generator dual internal water cooling technology invented by Zheng Guanghua and Wang Jisheng was given the major accomplishment invention award by the National Scientific Committee. In the National Scientific Meeting held in March 1978, Zhejiang University received 41 scientific research awards. Professors Zheng Guanghua and Dong Guangchang were rated as advanced individuals. The department of optical instrument engineering and the semiconductor material research office were rated as two advanced collective bodies. In 1979 and 1980, 3 projects in "the low heat low expansion cement," "a complete molecular sieve adsorption method to extract pure alkysilicon," and "a new thin inner cylinder flat wound band high pressure vessel" were given the national invention awards. In addition, the school had 22 research projects such as computation geometry, soft ground foundation, low temperature container, laser vibration measuring apparatus, the preparation of ditoluene heterogeneous catalyst, etc. were rated as major scientific research results.

In order to strengthen its technical exchange with other countries, Zhejiang University on one hand has invited foreign scholars to teach and lecture or to guide or participate in the work of scientific research and laboratory building (currently, there are 4 visiting foreign professors, 1 consultant, and 4 English teachers). On the other hand, it has selected and sent teachers and graduate students to study, investigate, and carry out scientific research at over 20 famous foreign universities and to attend academic meetings. In recent years, the school also established some school to school relations between some American universities, besides receiving representatives of foreign universities, research organizations, academic groups and education departments.

The publications published by Zhejiang University include ((Journal of Zhejiang University)) which has been distributed in 7 countries. In addition, it publishes on an irregular basis collections such as ((Collection of Translated New Technology)).

The school library currently has over 1 million volumes of books, periodicals and data, of which there are more than 9,000 periodicals. The various departments have their own information offices. The newly constructed 21,000 square meter seven story library building was to be completed. Inside the building, there are various types of student reading rooms, special reading rooms for teachers, and lecture halls to provide the condition for students and teachers for learning and carrying out academic activities.

Zhejiang University has 74 laboratories. It has already offered 213 fundamental and special field courses and 1,054 experiments. In 1979, the number of undergraduate students participating in these experiments reached 87,000 times. The quality and quantity of the experiments in fundamental courses have been restored and have exceeded the level before 1966. The experimental apparatus used by the graduate students had been upgraded also.

The school operates a machine shop, an electrical shop, a chemical plant, semiconductor material plant and an optical instrument intermediate testing base to undertake the task of student

practices and parts of the duties in the development of instruments and equipment in research and teaching experiments, as well as materials.

Zhejiang University Hospital has an outpatient department and an inpatient department. There are 60 beds.

The main campus of Zhejiang University is located in the scenic region Jade Spring on the northwest outskirt of Hangzhou. Its branch campus is located by Luhe Pagoda by Qiantang River on the southwest outskirt of Hangzhou (the original site of Zijiang University). The entire campus occupies 1,600 acres of land. The school currently has more than 320 thousand square meters of building space, of which nearly 100 thousand square meters are used in teaching and scientific research.

Since the liberation, Zhejiang University has already developed more than 25,000 specially trained people, which corresponds to 6 times the total number of graduates in 52 years. The alumni of Zhejiang University have contributed to socialist revolution and construction on the lines of politics, economics, science and technology, and culture and education.

In May 1978, Zhejiang University had been placed under the dual leadership of Chinese Academy of Science and the province of Zhejiang; Chinese Academy of Science was the primary party. In November 1980, with the approval of the State Council, the leadership system was changed to the Ministry of Education.

Current President: Qian Sanqiang (part time) Secretary of Party Committee: Liu Dan (part time)



The Province of Anhui

/148

Anhui University

School Address: Hefai, Anhui



The Campus View of Anhui University

Anhui University was planned and built in September 1927. The chairman of the "Planning and Building Committee" was Liu Wendian (who was a student of Zhang Taiyan and a professor of Beijing University). The site was located in Baihuating in the East Gate of Anging. In February 1928, the preparatory class began to accept students. In August of the same year, the undergraduate program began to recruit students. It had established the school of arts (Chinese department, philosophy and education department, and foreign language department), the school of science (mathematics department, physics department, chemistry department, and biology department), and the school of law (political science department, law department, and economics department). The program was four years for all of them.

. . . . . . . . . . . . .

In January 1929, the name was determined to be Anhui Provincial University. Chen Tianfang was retained as the president on a part time basis. In June, Wang Xingong succeeded him. In June 1930, Yang Liangong became the president. The name of the school was changed to Anhui Provincial Anhui University.

In 1946, Anhui University was changed to National Anhui University. The president was Tao Yin. The campus was located at Ling Lake outside the North Gate of the city of Anging. It added the school of agriculture (tea leaf department, forestry department, and agriculture department).

In March 1949, the city of Anging was liberated. The Anhui University Military Management Committee was established. The chairman was Zheng Qiyu.

In October 1949, Anhui University was moved to the city of Wuhu and merged with Anhui Institute. The name of the school still remained Anhui University. When the schools and departments were reorganized in 1952, the departments of agriculture, forestry, and tea leaf of Anhui University were moved to Hefai to establish the Anhui Agriculture Institute. The various departments in the schools of arts and science became the Anhui Normal Institute. Other departments were transferred to relevant schools in eastern China.

In order to suit the needs of the development of socialist careers, Anhui University was rebuilt in the provincial capital of Hefai in 1958. The first secretaryof the Provincial Party Committee, Zeng Xishen was also the president. On September 16 the same year, Chairman Mao Tsztong went to Anhui on an inspection tour. He wrote the school name for Anhui University.

When Anhui University was being rebuilt, Fudan University was in charge of supporting the establishment of the 4 departments in mathematics, chemistry, biology, and foreign language. Furthermore a part of the teachers and departmental responsible persons were also re-assigned from it. The physics department was transferred from Anhui Normal Institute. On October 3, 1958, Anhui

University officially began to offer courses. At that time, there were more than 500 students. The number of faculty members was less than one hundred. In 1959, the school added the Chinese department. In 1960, it added the political science department and history department. In 1962, it established the radio department. Until 1964, the number of students reached 1,800. The number of faculty members reached 400 (in which 12 were professors and associate professors, and 62 lecturers). There were more than 300 staff members and workers.

In 1964, the history department of Anhui University was merged into the Hefai Normal Institute. In 1966, the political science department was transferred to Anhui Labor University.

During the ten year period of chaos, Anhui University stopped recruiting for 4 years. Classes were resumed in 1970. There were 7 departments which accepted new students. In 1973, the school again set up the political science special field. In 1975, it established the political science department and set up two special fields in philosophy and economics.

In 1978, it established the French special field. In 1979, on the basis of the two special fields in philosophy and economics, it built the philosophy department and the economics department, respectively. In 1980, it added the foreign trade special field. Presently, Anhui University has a total of 11 departments and 20 special fields. The undergraduate program for each special field is four years.

> Chinese Department Chinese Literature Special Field History Department History Special Field Philosophy Department Philosophy Special Field Law Department Law Special Field Economics Department Economics Special Field Economic Planning and Management Special Field Foreign Trade Special Field Foreign Language Department English Special Field French Special Field Mathematics Department Applied Mathematics Special Field Computation Technique Special Field

test

/149

Physics Department Optical Physics Special Field Solid State Physics Special Field Physics Special Field Chemistry Department Analytical Chemistry Special Field Organic Synthesis Special Field Biology Department Botany Special Field Zoology Special Field Biochemistry and Microorganism Special Field Radio Department Radio Technology Special Field

<u> ? ?</u>

In 1979, the school also held a two year library science advanced study class. In 1980, it held training classes in finance and accounting for the Ministry of Light Industries in the Central Government. Each class lasts for six months. Anhui University began to accept graduate students in 1978. In 1980, the entire school had 3,277 students, of which 3,050 were college undergraduate students, 33 were graduate students and 194 were students in the training class and the advanced study class. Presently, there are 770 faculty members and research personnel. Among them, there are 10 professors, 40 associate professors, 525 lecturers and teachers equivalent to lecturers, 195 assistants and practice assistants, and 4 foreign professors. The entire school presently has 824 staff members and cadres.

Anhui University has been concerned about scientific research and obtained certain accomplishments. Since 1958, there have been 272 projects receiving awards from various levels of scientific meetings. There have been more than 20 special books and over 500 papers.

Presently, there are 9 research organizations set up at Anhui University; i.e., Chinese character research institute (with 19 research personnel), Russian problem research institute (with 25 research personnel), Oceanica literature research office, population theory research office, Chinese literature research office, optical research office, magnetism research office, biochemistry and microorganism research office, and polymer composite material research office.

Anhui University presently edits and publishes the academic publication ((Journal of Anhui University)). It was divided into the social science edition (4 issues per year) and the national science edition (2 issues per year). It has been distributed nationwide.

Anhui University library currently has more than 760 thousand volumes of books in its collection. Among them, there are more than 430 thousand Chinese books, 20 thousand thread bound books, 40 thousand foreign books, 30 thousand volumes of Chinese newspapers and magazines, and close to 40 thousand volumes of foreign magazines. There are 12 reading rooms in the library building.

Anhui University presently has 58 laboratories. It owns instruments and equipment such as a Model 51 processor, a 130 computer, a gas chromatograph, a super high speed centrifuge, etc. In addition, there are centralized laboratories such as the spectroscopic laboratory, the language laboratory, and the computer center. Furthermore, it has sets of video recorders and players.

Anhui University has organizations such as a school operated machine shop, a radio plant, a printing factory, affiliated high and elementary schools, a school hospital, and a nursery.

Anhui University presently occupies 648 acres of land. Currently, there are more than 110 thousand square meters of building area.

Since Anhui University was rebuilt in 1958, it has trained 7,743 graduates for our country. It has contributed to the socialist career.

Anhui University presently is under the jurisdiction of the People's Government of the Province of Anhui.

School Anniversary Date: September 16 Current President: Sun Taolin Secretary of Party Committee: Zhang Xingyan

Anhui Labor University

School Address: Yejia Bay, Xuncheng County, Anhui

The planning of Anhui Labor University began in September 1964. In January 1965, it was officially established with the approval of the State Council. It was under the jurisdiction of the province of Anhui. At that time, there were 4 departments in political science, Chinese, mathematics and science, and agriculture, as well as 4 special fields. Its duty is to develop teachers for higher level schools involved in part time farming and part time studying. It belongs to the nature of a higher level teaching institution.

In early 1966, the political science department of Anhui University was merged into Anhui Labor University. In 1970, the entire Anhui Education Institute, and the political education department of Hefai Normal Institute were merged into the school in order to reinforce the teaching strength. In 1971, Anhui Labor University was changed to a comprehensive university. It had 6 departments in political science, Chinese, mathematics, physics, agriculture, and tea. It was further divided into 8 special fields in philosophy, political economics, political education (stopped recruiting in 1978), Chinese, mathematics, physics, agriculture, and tea. In 1978, the school established two graduate classes in philosophical principles and political economics principles. Since its founding in 1965 until 1979, Anhui Labor University has developed a total of 2,929 undergraduate students.

In 1978, the province of Anhui decided to reorganize the departments at Anhui Labor University. Starting from April 1979, the mathematics and physics departments have totally been transferred to Anhui Education Institute.

Anhui Labor Institute presently has 4 departments in political science, Chinese, agriculture, and tea. Furthermore, it has 6 special fields in philosophy, political economics, political theory, Chinese, agriculture, and tea. The programs are four years. The graduate programs are three years. In 1980, it accepted 30 paid community students in the agriculture special field (a four year program) and 20 special class students for agricultural experimentalists (a two year program).

**F** 

Anhui Labor University had 1,349 students in school in 1980 (not including paid commuting students), and 11 graduate students. The entire school has 809 faculty and staff members, of which 242 are faculty members. Among the teaching staff, there are 14

associate professors, 94 lecturers, 2 teachers, and 132 assistants.

The library at Anhui Labor University has a collection of 350 thousand volumes of books, of which more than ten thousand volumes are foreign books and close to 340 thousand are Chinese books. In addition, it subscribes more than 1,000 periodicals. Among them, there are more than 260 foreign periodicals.

Anhui Labor University has its own affiliated organizations /150 including a high school, an elementary school, a nursery, a farm, and a printing shop.

The main campus and affiliated units of Anhui Labor University presently occupies 945 acres of land (not including the area of the farm). Currently, there are 60 thousand square meters of building area.

Anhui Labor University is presently under the leadership of the People's Government of the province of Anhui.

Current President: Xie Jiesan Secretary of Party Committee: Zhang Zhaojia

China Science and Technology University

School Address: Jin Zhai Road, Hefai, Anhui

China Science and Technology University was founded in September 1958.

In order to satisfy the urgent need for people in the development of our national economy and scientific industries, China Science and Technology was approved to be built by the State Council through the recommendation of the president of the Chinese Academy of Science, Guo Moruo, as well as with the concern of the older generation revolutionaries such as Premier Chou, Deng Xiaoping, Nie Rongzhen, Xu Xianqian, Lu Dingyi, etc. Guo Moruo was the chairman of the planning committee of the school.

On September 20, 1958, China Science and Technology University was officially founded in Beijing. It was under the leadership of China Academy of Science. The founding of the school was called "an important event in the education history and the scientific history in China."

After China Science and Technology University was founded, Chen Yi, Nie Rongzhen, Xu Xianqian, Tang Zhenlin, Fang Yi, Wan Li, etc., went to inspect the school, to give reports, to write characters, and to attend commencement ceremonies.

In order to run China Science and Technology University well, China Academy of Science practiced the policy of "combining the academy with the school, and institutes with departments." The school obtained a great deal of support in terms of manpower, materials, equipment, and books and data from the entire academy of science.

When the school was founded, it had 13 departments in nuclear physics and nuclear engineering, technological physics, chemical physics, physical thermal engineering, radio electronics, automation, mechanics and mechanical engineering, radiation chemistry, geochemistry and rare elements, polymer chemistry and polymer physics, applied mathematics, and computation technique, biophysics, and applied geophysics. Moreover, it was further divided into 42 special fields. The program was five years. Each departmental chairman was filled by the chief or associate chief of the relevant institute, including famous scientists such as Zhao Zhongyao, Shi Ruwei, Guo Yanghuai, Li Shucheng, Ma Daqiu, Qian Xuesan, Yang Chengzong, Ho Tefeng, etc.



Vice Premier Fang Yi inspected the work at China Science and Technology University in June 1980 and was photographed with students with three good aspects (the fourth from left is Vice Premier Fang Yi and the fifth from left is President Yan Jici).

In 1959, China Scientific Information University was merged into China Science and Technology University. It set up the scientific information department. The department has 3 special

fields in physics, chemistry and biology. In 1960, the department was abolished. In 1964, the original 13 departments of China Science and Technology University were merged into 6 departments in mathematics, physics, modern chemistry, modern physics, modern mechanics, and radio electronics. Under these departments there were 19 special fields.

As for the size of China Science and Technology University, initially it recruited around 1,500 people each year. Since 1961, it was changed to accepting around 600 people per year. Until 1966, China Science and Technology University had graduated a total of more than 5,000 people. There were more than 3,600 students at the school.

In December 1969, China Science and Technology University was moved from Beijing to the province of Anhui. First, it was located in the city of Anging. Later, it was moved from Anging to Hefai. It was operating at the original site of the original Hefai Normal Institution by expansion.

In 1977, with the approval of the State Council, China Science and Technology University established a graduate student institute in Beijing. It had 6 teaching departments in mathematics, physics, chemistry, biology, geology, and radio electronics.

Over the long period of time, China Science and Technology University has formed its own characteristics - closely combining teaching with research. Due to the attention paid by the nation, the university has always maintained the policy of accepting outstanding students in the country ever since its inception. The school is especially concerned with the teaching of fundamental The scientists from various research institutes came to courses. work and teach part time. Famous scientists such as Yan Jici, Luo Huagang, Qian Xuesen, etc. had personally worked, taught, and written lecture notes at the school. According to an incomplete statistics, during the initial 5 years of its operation, there were more than 300 scientific research personnel who worked part time. Among them, there were 127 researchers and associate researchers. In the meantime, the students also went to the institutes to join scientific research. Just because of this arrangement, the graduates of China Science and Technology University

have good foundations and higher quality. They are widely welcomed by the user organizations. Since its inception, China Science and Technology University has developed a total of 10,142 college graduates for our country.

Over the long period of time, China Science and Technology University has created a good style. The late president Guo Moruo had summarized this school style into 16 words: "running the school diligently, working hard with modesty, being politically and technically sound, united together being helpful."

Since its founding, China Science and Technology University has obtained a number of scientific research results. For example, the elementary particle theory group at the school proposed the "starton model" with other related units in 1965, which entered the leading edge of the discipline in the world.

In recent years, the scientific research work at China Science and Technology University has obtained relatively more significant accomplishments. There were 15 projects which received awards in the National Scientific Meeting in 1978. Forty-three projects /151 received the major scientific research accomplishment awards issued by the Chinese Academy of Science. Among them, the studies on the physical theory of the heavenly body and the theory of the critical temperature in super conductivity have already obtained major accomplishments. Professor Fang Lizi, in the area of astronomical physics, and Associate Professor Wu Xiaoping (woman), in the theoretical study and experimental aspect in the motion pattern of laser scattered spot field, have obtained important results. The latter received a first class major scientific accomplishment award in 1979 from the China Academy of Science. Professor Gong Sheng has obtained lots of results in the area of functional theory. He has made significant progress in the problem of ((Bebobaher Hypothesis)).

China Science and Technology University currently has 10 departments and more than 30 disciplinary directions. The programs are five years.

Mathematics Department

Chairman: Vice President of China Academy of Science Hua Luogang

With: Computational Mathematics Special Field Statistical Planning Special Field Fundamental Mathematics Special Field Applied Mathematics Special Field

## Physics Department

Chairman: Vice Chief of the Physics Institute of China Academy of Science, Ma Dayou

With: Semiconductor Special Field Laser and Optics Special Field Laser Special Group Solid State Light Emitter Special Group Crystallography Special Group Low Temperature Physics Special Field Magnetism Special Field

## Modern Chemistry Department

Chairman: Chief of the Fujian Material Structure Institute of China Academy of Science, Lu Jiaxi

With: Inorganic Chemistry Special Field Polymer Chemistry and Polymer Physics Special Field Analytical Chemistry Special Field Chemical Physics Special Field Radiation Chemistry Special Field

Modern Physics Department

Chairman: Chief of High Energy Research Institute of China Academy of Science, Zhang Wenyu

With: Theoretical Physics Special Field Experiental Nuclear Physics Special Field Experimental Nuclear Physics Special Group Nuclear Electronics Special Group Electrical Physics Special Field Plasma Special Group

Accelerator Special Group

Modern Mechanics Department

Chairman: Vice Chief of the Mechanics Research Institute of China Academy of Science, Wu Zhonghua

With: High Velocity Aerodynamics Special Field Flying Vehicle Structural Mechanics Special Field Jet Engine Thermal Physics Special Field Explosion Mechanics Special Field

Radio Electronics Department

Chairman: Secretary General of the Academic Committee of China Academy of Science, Guo Tehuan With: Radio Technology Special Field Microwave Technology Special Field Automatic Control Special Field Electronic Computer Special Field Radio Telemetry Special Field

Earth and Space Science Department

Chairman: Vice Chief of the Geophysics Research Institute of China Academy of Science, Fu Chengyi

With: Geophysics Special Field Atmospheric Physics Special Field Space Physics Special Field Geochemistry Special Field

Biology Department

المعالمة والمعالمة المعالمة المعالمة المعالمة المعالية والمعالية والمعالية والمعالية والمعالية والمعالية والمع

. N.

Chairman: Chief of the Cell Biology Research Institute of China Academy of Science, Zhuang Xiaote

With: Biophysics Special Field Nerve Biology Special Field Molecular Biology Special Field Cell Biology Special Field

Precision Machinery Department

Chairman: Li Ming

With: Precision Machinery Special Field

Scientific Organization and Planning Management Department (planning group)

China Science and Technology University is operating at Hefai and Beijing simultaneously. In 1980, there were 2,714 undergraduate students in the main campus in Hefai (including the 145 people in the youth class) and 142 graduate students. The graduate school in Beijing had more than 1,000 graduate students. The main campus of the school presently has a total of 2,930 faculty and staff members, of which 1,490 are technical teaching staff members. Among the technical faculty members, there are 23 professors, 75 associate professors, and 800 lecturers and engineers. In addition, it has retained 20 part time professors from the Academy of Science and 2 foreign experts. The graduate school in Beijing currently has 300 faculty and staff members; among them there are 33 professors and associate professors.



Vice president Yang Chengzong of China Science and Technology University among young college students

China Science and Technology University presently has a matehamtics research institute, an astronomical physics research laboratory, a quantum chemistry research laboratory, and an organic metallic chemistry research laboratory. Furthermore, the planning group of electronic synchrotron radiation was set up to build the "electronic synchrotron radiation laboratory."

China Science and Technology University currently edits and publishes ((Journal of China Science and Technology University)). /152 The school library has a collection of more than 460 thousand volumes of books, of which 190 thousand are foreign books. In addition, there are 180 volumes of periodicals.

The affiliated organizations of China Science and Technology University include: the school operated machine shop, the printing plant, a department operated radio factory, a semiconductor factory, a chemical plant, a nuclear electronic instrument plant, a school run farm, affiliated high and elementary schools, and a hospital.

China Science and Technology University presently occupies 841 acres of land. The total building area is close to 170 thousand square meters. China Science and Technology University is under the control of China Academy of Science.

Anniversary Date: September 20 Current President: Yan Jizi (part time) Secretary of Party Committee: Yang Haipo

## Hefai Polytech University

School Address: Tunxi Road, Hefai, Anhui

Hefai Polytech University is a multi-disciplinary science and technology university. Its fundamental duty is to develop high level technical people and scientific research people for our country.

The predecessor of Hefai Polytech University was Anhui Provincial Bangfu Higher Industrial Professional School. It was founded after winning the war against the Japanese in 1945. In the winter of 1946, due to the request of various kinds of people in northern Anhui, the Nationalist Government's Anhui Provincial Government decided to rebuild this school. Later, in the fall of 1947, the school was moved to Huainan Dongshan and was officially rebuilt into Anhui Huainan Polytech Special School. At that time, the school recruited graduates from junior high schools. The program was five years. It had 3 engineering classes in civil engineering, mechanical engineering, and electrical engineering. There were 266 students and 52 faculty members. Including workers and other personnel on duty, the total number was 366. The school buildings only included very simple one story buildings with 90 rooms. It occupied over 200 acres. It was one of the major polytechnical special schools in the province of Anhui.

On January 18, 1949, Huainan was liberated. The Northern Anhui Administration Office Education Bureau and the People's Government in Huainan Special District took over Anhui Huainan Polytech Special School on January 19. A committee to restore the school was established. The chairman of the committee was Professor Cai Yangqiao of the school. The chief of the culture and education office of the People's Government in the Huainan Special District, Chen Shengye, was the vice chairman. This opened a new chapter in the history of the school. In January

-

1950, Huainan Polytech Special School changed its name to Huainan Polytechnical Special School. In November of the same year, it was again changed to Huainan Coal Mining Special School. The School Restoration Committee was changed to the Temporary School Affairs Committee. It was under the jurisdiction of the Huadong Industry Department and the Huadong Education Department. The chairman was the manager of the Huainan Coal Mining Company, Wu Bowen. Zhu Jieping and Cai Yangqiao were the vice chairmen. There were 441 students in school. There were 93 faculty members. Together with workers and other personnel on duty, the total number was 601. As for the special fields offered, in addition to the original 3 classes, 1 more class in coal mining engineering was added. The program changed from the 5 year special school program to a three year college program. It accepted high school graduates. In the meantime, it had a preparatory class to accept junior high school graduates to study for two years. Those who passed the examination could be allowed to enter the undergraduate program.

Through reorganization, restoration, and construction during the early days after the liberation, Huainan Coal Mining Special School was placed on a continuously developing track. In May 1951, the school was changed to the Huainan Coal Mining Engineering Special School which was placed under the dual jurisdiction of the Central Fuel Industry Ministry Coal Mine Management Bureau and the Education Department of the Huadong Military and Political Committee. It had 7 special fields in geology, well and lane engineering, mining machine manufacturing, electrical machine, coal mining, measurement, and washing and selection (of coal). In 1953, the number of students in school at Huainan Coal Mining Engineering Special School had already developed to 1,294. There were 185 full time teachers (30 professors, 17 associate professors 44 lecturers, and 94 assistants). The school building area had already increased to three and one half times that before the liberation. The teaching equipment and library materials were significantly improved.

After the reorganization of the departments and schools in higher learning institutions, Huainan Coal Mining Engineering Special School had already had the condition to change and develop from a special school to an undergraduate school in 1954. In the summer of the same year, it began to accept undergraduate students in the two four year programs in the special fields of mining and mining electrical machinery. In April 1955, with the approval of the State Council, Huainan Coal Mining Engineering Special School was rebuilt into Hefai Mining Institute. In the summer of 1956, the school was moved from Huainan Dongshan to the southern suburb of Hefai. It had 5 engineering departments in machine manufacturing, mining electrical machine, mining, geology, and chemistry, as well as 8 special fields in machine manufacturing technology and equipment, mining machinery, mining electrical machine, power plant electrical network and electrical system, drilling, mining well construction, inorganic chemical engineering, mineral geology, and surveying. In 1958, Hefai Mining Institute had developed into 11 departments, 31 special fields, 5 specializations, 25 laboratories, 30 teaching and research offices, two research institutes, and 16 research offices. The number of students in school had reached 3,813. There were 1,021 faculty and staff members, including 363 full time teachers (17 professors, 17 associate professors, 73 lecturers, and 256 teachers and assistants). There were more than 230 thousand volumes of library materials. The laboratory equipment and school operated factories had made relatively large developments. From 1953 to 1958, the school had selected 206 people to study in related institutions in the country. Furthermore, 19 people were selected and sent to the Soviet Union and other countries to study.

In September 1958, Hefai Mining Institute was changed to Hefai Polytech University. It was placed under the dual leaderships of the Central Ministry of Education and the Anhui Province. Since then, this school had developed from a single disciplinary mining institute into a multi-disciplinary technical university. On October 7, 1958, the founding ceremony of Hefai Polytech University was held. Moreover, this date was decided to be the school anniversary date. The leaders of the Party and the

451

Government such as Liu Shaoqi, Zhu Te, Deng Xiaoping, Dong Biwu, Chen Yi, Peng Zhen, Yang Shangkun, etc., as well as famous scientist, Qian Xuesen, visited the school at one time or another. It had a great promoting effect on the development of the school.

In 1962, according to the eight word policy of the Central Government "reorganization, reinforcement, strengthening, improvement," and the 60 regulations and requirements of higher education, Hefai Polytech University reorganized and established the normal teaching orders so that the standards of teaching and scientific research continued to improve. From 1958 until 1966, the number of students at the school was maintained steadily at around 4,500. The number of full time teaching staff was developed to 747 (15 professors, 14 associate professors, 146 lecturers, 5 teachers, and 567 assistants). The special fields offered were maintained at 7 departments and 15 special fields. It had 36 teaching and research offices, 63 laboratories, 12 scientific research offices, 6 scientific research centers, and two research groups. There /153 were more than 520 thousand volumes of books and nearly twenty thousand pieces of information. The school building area reached 130 thousand square meters. The number of pieces of teaching equipment is 93 times that in 1949.

During the ten year period of chaos, Hefai Ploytech University was disturbed and damaged by Lin Biao and the "Gang of Four". It stopped recruiting for 5 years. From the end of 1970 to 1976, it accepted and trained 6,100 students in three year programs. In February 1970, Anhui Engineering Institute and Anhui Hydraulic Institute were merged into Hefai Polytech University. In 1972, all the special fields in the mining department, and a portion of the coal field geology in the geology department at Hefai Ploytech University were transferred away to form the Huainan Coal Institute.

After the "Gang of Four" was crushed, Hefai Polytech University was reorganized and restored. Since 1977, it began to accept four classes of undergraduate students through the National Entrance Examination. In 1978, Anhui Engineering Institute was separated from Hefai Polytech University to reinstate the original system. 452

Hefai Polytech University presently has 11 departments and 30 special fields. In addition, there is 1 common fundamental course division.

Applied Physics Department Applied Physics Special Field Physics Teachers Class Agriculture Machinery Department Agriculture Machinery Special Field Internal Combustion Engine Special Field Motor Vehicle Special Field Tractor Special Field Precision Machine Engineering Department Vacuum Technology and Equipment Special Field Precision Quantitative Instrument Special Field Engineering Drafting Teachers Class Mechanical Manufacturing Engineering Department Forging Technology and Equipment Special Field Mechanical Manufacturing Technology and Equipment Special Field Casting Technology and Equipment Special Field Metallic Materials and Heat Treatment Special Field Mechanical Design Special Field Mechanical Design Teachers Class Metal Heat Treatment Advanced Study Class Electrical Engineering Department Radio Technology Special Field Industrial Electronic Technology Special Field Industrial Electronic Technology Teachers Class Semiconductor Device Special Field Electronic Computer and Application Special Field Construction Engineering Department Industrial and Civilian Construction Special Field Architecture Special Field Water Conservancy Engineering Department Water Conservancy and Hydroelectric Engineering Construction Special Field Farmland Irrigation Engineering Construction Special Field Chemical Engineering Department Inorganic Chemical Engineering Special Field Ploymer Chemical Engineering Special Field Powder Metallurgical Materials Special Field Geology Department Geophysics and Mine Surveying Special Field Hydrological Geological Engineering and Geology Special Field Mineral Geological Survey and Exploration Special Field Management Engineering Department Management Engineering Special Field Fundamental Courses Division Mathematics Teachers Class English Teachers Class Engineering Mechanics Teachers Class

In addition, there is a physical education teachers class.

As for the studying period, with the exception that the mechanical design special field is five years and the physical education teachers class is two years, the remaining are four years.

Hefai Polytech University had 4,620 students in school in 1980. In addition, there were 54 graduate students in school studying in 18 special fields. It also had 81 advanced study students.

It presently had 2,847 faculty and staff members, of which 1,072 are full time faculty members (14 professors, 61 associate professors, 586 lecturers, 39 teachers, and 372 assistants). There are 125 auxiliary teaching staff members. The entire school is capable of offering 79 courses and 438 experiments.

In order to strengthen the construction of the teaching team, Hefai Polytech University has already selected and is in the process of selecting 24 teachers to study abroad, and 72 people to study in other universities in the country. In recent years, the school offered 13 advanced study classes in English, Japanese, German, and French, and trained 1,055 teachers in the university. Furthermore, it held 3 accelerated technical Japanese classes and trained 398 teachers. It also held 3 short term interdisciplinary classes and developed 121 people. It has invited 11 foreign and domestic professors and scholars to teach, lecture, and lead research work.

In the aspect of scientific research work, since the liberation, especially after 1958, the school has already undertaken more than 500 key research projects. Just based on the incomplete statistics since 1970, more than 150 scientific research projects have already obtained significant development. In 1978, Hefai Polytech University received the National Scientific Meeting Awards in 5 projects, including the laser iris removal apparatus, the laser hologram, the volcanic rock, the rubber dam low and cold temperature solidification, etc. Five projects, including the Model D3550 electrolytic machining lathe, were given the National Mechanical Industrial and Scientific Meeting awards. There were 3 advanced persons praised by the meeting.

Thirty-two projects received the Scientific and Technical Meeting awards in the province of Anhui. There were 6 people cited in that meeting as advanced individuals. Some of the results have reached or gotten close to the advanced levels in and out of the country. For example, the "elastic foundation beam solution method" developed by Professor Cai Siwei of the mechanics teaching and research office has been acknowledged as the Cai's method because it improved the present method abroad. Associate Professor Lu Zenya of the physics teaching and research office developed the I-J function and studied its applications. He also developed the I-J function slide ruler. In the laser teaching and research office, Lecturer Chen Guojian was the center of the development of a "laser iris removal apparatus" under the coordination of other related organizations. It provided an effective clinical instrument for the surgical removal of the iris. The research result of the "lateral movement of the Yan-Lu Fault" produced by Associate Professor Xu Jiawei of the geology department more accurately proved that the Yan-Lu Fault belongs to the eastern faults in the world. It was seriously looked upon by the geological community in and out of the country. In /154 the ((Selected Scientific Research Accomplishments from 1977 to 1979)) edited by the Education Bureau of the First Mechanical Industry Ministry for the higher learning institutions under its jurisdiction, there were 29 projects selected from Hefai Polytech University, including 91 scientific papers and 13 special publications.

Since 1978, Hefai Polytech University has strengthened its academic contact and interaction with foreign countries. It has sent its personnel to countries such as the United States and West Germany to visit and investigate their higher scientific and technical institutions, factories, and technical research departments, as well as to attend international academic meetings. It has obtained more profound understanding with regard to the present status of foreign technical institutions, administrative management, teaching standard, departmental offerings, research work, activities of the professors and the life of students.

The school has already established school to school relationships with some foreign universities.

Hefai Polytech University presently has 55 teaching and research offices and 57 laboratories. It has approximately 16,400 pieces of laboratory equipment. The school has 1 mircocomputer application research institute. It has 8 research offices in laser, special machinings industrial automation, polymer composite materials, mechanical and electrical energy conversion, structural mechanics, and water conservancy science. In addition, it owns a relatively complete set of audiovisual teaching equipment.

The library of Hefai Polytech University has 500 thousand volumes of Chinese books and 180 thousand volumes of foreign books. In addition, it has 100 kinds of bound volumes of Chinese and foreign periodicals.

Hefai Polytech University has 3 school operated affiliated machine, electrical and chemical plants. They accept the students in their practice as well as machine teaching and research equipment, and develop new products. Among them, the machine plant and the electrical plant also undertake the production duty planned by the nation. The school also has affiliated high school, elementary school, part time evening college, kindergarten, hospital, printing shop, and "May 7th" factory.

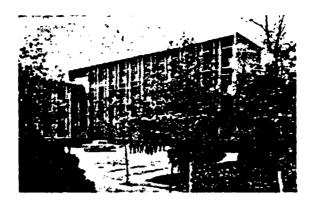
Hefai Polytech University presently occupies 1,150 acres of land. There are 190 thousand square meters of building space. In addition, a 10 thousand square meter scientific laboratory building is currently under construction.

During the thirty years since our liberation, Hefai Polytech University continues to develop. It actively makes contribution to our country. From 1949 to 1980, it has delivered 17,525 special and undergraduate students for our country. In addition, through part time evening college, correspondence education, audio-visual education, and various short term training classes, it has developed 8,760 scientific and technical people.

Hefai Polytech University presently is under the jurisdiction of the First Mechanical Industry Ministry.

Present President: Gu Shengu

Secretary of Party Committee: Wan Liyu



External Scene of the Library Building of the Hefai Polytech University



The Province of Fujian

/155

## Xiamen University

School Address: Xiamen, Fujian

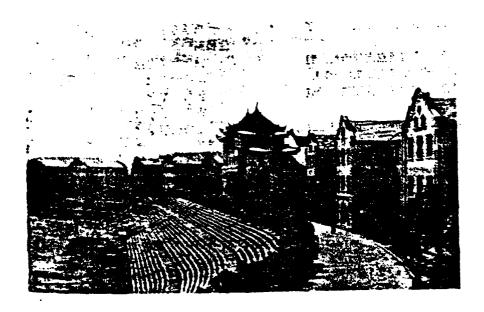
Xiamen University is a comprehensive with disciplines in arts, science, law, economics and finance, and foreign language. It was founded in 1921 by the famous patriotic overseas Chinese, Mr. Chen Jiageng. During the initial period after its inception, Dr. Lin Wenqing was the president. It had two divisions in teaching (including arts and science) and business. Later on, it gradually added departments and classes in engineering news, law and pharmacy. In 1930, Xiamen University had already expanded to 5 schools in arts, science, law, business, and education. It had 19 departments in Chinese, foreign language, philosophy, history, sociology, mathematics, physics, chemistry, zoology, botany, political science, economics, law, banking, accounting, business management, education administration, education methodology, and education principles. In 1936, Xiamen University was changed to 3 schools of arts, science and law and business with 9 departments. The number of students also grew from the original 136 to 321. During the 16 year period as a private school, Xiamen University had a total of 571 graduates.

During this period, the major power in the cultural revolution in our country, Mr. Lu Xun, was invited to teach at Xiamen University between September 1926 to January 1927. In addition to teaching two courses in ((Chinese Novel History)) and ((Chinese Literature History)), he also wrote more than 70 papers. They were more than 300 thousand words in total.

In 1937, Xiamen University became a national university. The famous physicist, Dr. Sa Bendong was the president. After the war against Japan broke out, the school was moved to western Fujian at Changding. The faculty and students overcame various difficulties. They carried forward the hard working school style and insisted on teaching and learning. President Sa Bendong and Deans Fu Ying and Xie Yuming all personally taught fundamental courses. The famous geologist Li Siying and the famous British Joseph Lee were also invited to lecture at Xiamen University in the remote mountain area. Due to the strict requirements specified by the teachers, the students worked very hard. The quality of teaching continued to improve. The scale of the school also continued to gradually enlarge. Until the anti-Japanese war was won, Xiamen University had already set up 4 schools in arts, science and engineering, law, and business, with 15 departments. The number of students increased from over 300 to approximately 1,000.

In 1946, Xiamen University was moved back to Xiamen, Dr. Wang Teyao succeeded as the president. At that time, the campus was abandoned and the buildings were damaged. The Nationalist Party switched its policy from passively resisting the Japanese to openly starting a civil war. The funding to restore the school was delayed or even withheld. The faculty and students persisted to overcome the difficulties. On the basis of restoring the original schools and departments, it also added the oceanography department, the international trade department and the justice group of the law department. The number of students

increased to 1,600. At that time, famous professors, such as Wang Yanan, Guo Dali, Jin Liru, Hong Sheng, Yang Dongfu, Zheng Chong, Lu Jiaxi, Tang Shifeng, Yu Jian, Guo Yiqin, etc., taught at Xiamen University.



The Five Buildings by the Sea Shore at Xiamen University

As early as the Great Revolution Period, there were active communists at Xiamen University. In 1925, Luo Yangcai, who was a student of the department of education, was the representative of the student union of the city of Xiamen to participate in the national student union representatives meeting in Guangzhou. Moreover, he entered the Chinese Communist Party there. After returning to Xiamen, he established the branch office of the Communist Party in Xiamen University to begin the revolution work. The progressive faculty and students at Xiamen University were actively involved in the "May 9th" national disgrace memorial movement in 1926, the "Paris Commune and March 18th Memorial" movement in 1927, and the anti-imperialism and anti-reactionary warload student campaigns during the occasions of remembering "May 30th" and "March 18th" incidents in 1929 and 1930 after the Great Revolution failed. After the "September 18th" incident the entire faculty and staff members of Xiamen University had issued an open letter "to the people in friendly countries". The Student Association to Resist the Japanese to Save the Country also sent representatives to hand in petitions in Guangzhou and Nanjing to request the Government to fight the Japanese. Three students including Yi Yuanxun voluntarily went north to resist the Japanese in February 1933 due to patriotism. In April, Yi Yuanxun was killed on the anti-Japanese front line /156 in Luau Xian, Hebei. In November 1935, the entire faculty and students of Xiamen University issued a communique to the nation to oppose the autonomy of northern China in support of the anti-Japanese patriotic movement of the students in northern China. In early 1939, the president and the entire professors of the school sent a telegram to denounce the disgraceful behavior of Wang Jinwei who "collaborated with the enemy" and "let the nation and the country behind." They insisted on fighting to the end. When the Nanjing puppet government was formed in 1940, the whole faculty and student body sent a telegram to denounce Wang Jinwei. They called on the whole nation to "fight the evil spirit in order to maintain the nation." Later on, the faculty and students of Xiamen University were actively involved in the campaign to oppose Kun Xiangxi in 1943, the anti-American movement in 1946, the anti-hunger, and the anti-oppression, and anti-civil war movement of 1947. They coordinated with the march of the People's Liberation Army to welcome the "approaching daybreak."

In 1949, the New China was born. A new page was turned over in the history of Xiamen University. The Political Affairs Ministry of the Central People's Government appointed the famous economist, and the translator of ((Capitalism)), Wang Yanan, as the president.

In 1950, the original law school and school of arts at Xiamen University were consolidated into the school of arts and law. The 2 departments of law and politics were merged into the department of politics and law. The original business school was merged with the economics department to become the school of

finance and economics. Under this school, there were 4 departments in finance, international trade, accounting and business management, and statistics. The entire school had 4 schools in arts and law, finance and economics, science, and engineering. There were 17 departments. Not too much later, a part of the social science research institute of the research council of Fujian was transferred to the school. The research personnel went to teach at various departments.

----

Since then, Fuzhou University Finance and Economics School, which was formed by the departments of politics, law and economics in the original Fujian Institute, and Fujian Agriculture Institute were also merged into Xiamen University. In addition, the school also established a new special class in sailing (later changed to the department of navigational affairs) and commerce, as well as teacher training classes in mathematics, physics, and chemistry.

During the reorganization of the schools and departments in the entire country, Xiamen University School of Agriculture and Fuzhou University School of Agriculture merged to become the Fujian Agriculture Institute. The physics group in the oceanography department was transferred to Shandong University. Later on, it became a part of Shandong Ocean Institute. The navigation special class merged with Jimei Seaproduct and Commercial Ship Special School. Later on, the 4 departments of aeronautical engineering, mechanical engineering, electrical engineering, and civil engineering of the engineering school of Xiamen University were transferred to Nanjing Institute of Aeronautics, Nanjing Institute of Engineering, Nanjing Institute of Water Conservancy, and Zhejiang University, respectively. The business management department was merged into Shanghai Institute of Finance and Economics. The law department was transferred to Huadong Institute of Politics and Law. The education department was merged into Fujian Normal Institute. The various departments in the school of finance and economics were consolidated into a single department of economics, which remained at Xiamen University. In the meantime, the school also established an accelerated high school for workers and farmers.

In 1962, Xiamen University was listed as one of the key higher education institutions in the nation. Until 1966, the school had 8 departments and 17 special fields. The number of students reached over 3,000. The faculty and staff members were more than 1,500. However, the ten year period of chaos made Xiamen University suffer tremendous damage.

After the "Gang of Four" was crushed, especially after the Third Central Committee Meeting of the Eleventh Party Congress, the school restored and established the normal teaching order through correction of previous mistakes and reorganization. It stresses the overall development of morality, wisdom, and body. It teaches according to the background. It emphasizes the training of basic skills and the teaching of fundamental theories. The quality of teaching continues to improve. It has already walked on a steadily developing route.

Presently, Xiamen University has 11 departments and 37 special fields. The program is four years.

εď

Chinese Department Chinese Language and Literature Special Field Foreign Language Department English Special Field Japanese Special Field Russian Special Field French Special Field History Department History Special Field Archaeology Special Field Economics Department Political Economics Special Field Planning Statistics Special Field Financial Accounting Department Finance Special Field Banking Special Field Business Management Special Field Foreign Trade Special Field Philosophy Department Philosophy Special Field Law Department Law Special Field Mathematics Department Mathematics Special Field Control Theory Special Field Computational Mathematics Special Field Physics Department Radio Physics Special Field Semiconductor Physics Special Field Photoelectronics Special Field Physics Special Field

Chemistry Department Physical Chemistry Special Field Catalytic Chemistry Special Field Electrochemistry Special Field Analytical Chemistry Special Field Inorganic Chemistry Special Field Chemistry Special Field **Biology** Department Microbiology Special Field Zoology Special Field Botany Special Field Parasitology Special Field Biochemistry Special Field Oceanography Department Oceanic Chemistry Special Field Oceanic Biology Special Field Oceanic Physics Special Field

Xiamen University had 4,513 undergraduate students and 156 graduate students in 1980. There were 2,475 faculty and staff members, of which 22 were professors, 39 were associate professors, 726 were lecturers, 6 were teachers, and 402 were assistants. In addition, it retained 3 foreign English experts and 1 Japanese expert.

Xiamen University presently has 18 scientific research /157 organizations, including the Southeast Asia Research Institute Economics Research Institute, Chinese Language and Literature Research Institute, English Language and Literature Research Institute, History Research Institute, Taiwan Research Institute, Materialist Dialectics Research Office, Higher Education Scientific Research Office, Population Problem Research Office, Humanity Museum, Mathematics Research Institute, Oceanic Science Research Institute, Biological Science Research Institute, Environmental Protection Analytical Instrument and Method Research Office, and Natural Dialectics Research Office. It has 267 full time research personnel.

Xiamen University began to get engaged in the research of x-ray diffraction of crystal structures. Furthermore, it accepted graduate students and advanced studying teachers in crystal structure. In 1955, it began to offer courses in material structure and physical chemistry. In the meantime, it began the research in electrochemistry. In the 1956 and 1963 national technical

plans, the physical chemistry at Xiamen University had undertaken many fundamental theoretical and applied research subjects. It had been entrusted by the Ministry of Education, Ministry of the Fourth Mechanical Industry, and Ministry of Petroleum and Chemical Engineering to hold many academic discussions and training classes to develop a number of backbones in teaching and research in catalysts and electrochemistry. In 1963, Professor Cai Qirui presented the concept of "the complexing activated catalytic effect." It was a creative model assumption internationally. Professor Tian Zhaowu has obtained a certain accomplishment in the research of the "porous electrode polarization theory." The comprehensive electrochemical testing apparatus, the electroplating parametric testing apparatus, and the chemical power source developed by him have already been applied in the related departments and plants.

Xiamen University is located by the sea. During the early stage since its inception, it had opened up research in oceanic biology and published special academic publications. In 1946, the oceanography department was established. It had an affiliated China Ocean Research Institute. In 1951, when the schools and departments were reorganized, Xiamen University kept the oceanic biology research office. In 1958, it developed and established 3 special fields in oceanic physics, oceanic chemistry, and oceanic biology. In 1970, these 3 special fields were used as the foundation to rebuild the department of oceanography. In recent years, the school has actively been involved in the development of the teaching and research of oceanic science and obtained many results. Professors Zheng Chong and Li Faxi have attended international oceanographic meetings many times. Presently, the department has already become a base for oceanic science research and development of qualified personnel.

Since 1956, Xiamen University set up the Southeast Asia Research Institute to carry out the study of Southeast Asian problems. In the meantime, an overseas correspondence department was established, which had classes in Chinese, Chinese

traditional medicine, mathematics, physics, and chemistry. It has accepted more than 10 thousand correspondence students from over 30 countries and areas. It was interrupted during the ten year period of chaos and then reinstated in 1980. Presently, it has a Chinese language special class, a Chinese traditional medicine special class, and a Chinese language advanced study class. They have already officially begun to accept students from overseas and classes have started.

In the human science aspects such as literature, history, philosophy, and ancient classes, Xiamen University also had certain foundations. In the history of the Ming and Qing Dynasties, and the history of Sui and Tang Dynasties, Professor Fu Jialing and Professor Han Guopan of the history department have made certain accomplishments. In recent years, Professor Fu Jialing has been invited to lecture in the United States, Japan, and Canada. Xiamen University had a business school since its inception. When Professor Wang Yanan was working at the school. he was concerned about the study of ((Capitalism)). He personally developed a number of people in the teaching and research team who had Marxism and Leninism economic theories and could analyze the economic problems in the Chinese society. Some of them have already become the backbone strength of various special fields in the department. Some of them have already become the famous people in the academic theoretical community and business community in the country, as well as in the world.

In recent years, the academic activities at Xiamen University have been wery active. New accomplishments have been made in scientific research. The entire school undertook the tasks of editing and reviewing more than 60 nationally unified teaching materials. Furthermore, it edited and published a part of the teaching materials which showed its own characteristics. ((Journal of Xiamen University)), which was founded in 1952, is distributed openly to the world. The monthly, ((Chinese Economic Problems)) was founded and is operated by Professor Wang Yanan. It is distributed openly in the country.

It also publishes internal publications such as ((Southeast Asian Problems)), ((Selected Translations of Southeast Asia Information)), ((Selected Translation of Economic Information)), ((Foreign Higher Education Information)), and ((Science and Technology at Xiamen University)) on an irregular basis. The various departments and research institutes in arts have obtained better results in the studies of Chinese economic problems, ((Capitalism)), Southeast Asia, Sui, Tang, Ming, and Qing Dynasty history, and Chinese dialects. In 1980, the Taiwan Research Institute was newly established. It concentrates on the academic study and theory of the politics, economy, law, customs, literature, and education in Taiwan. The various departments in science are primarily studying fundamental theories. They are also involved in applied science. The school has undertaken several dozens of scientific research projects in the studies of catalysis, electrochemistry, parasitology, fundamental mathematics, luminescence physics and oceanic science and obtained significant results.

In the 1978 National Scientific Meeting, Xiamen University had 11 scientific research projects receiving awards from the meeting, including the "complexing catalytic theory and chemical simulation of biological nitrogen" and "electrode process and the the theoretical study of the equivalent circuit." Professors Cai Qirui and Tang Chongzhang and 4 organizations were cited as advanced workers and advanced groups. They were praised in the meeting.

Xiamen University is leaning on the green Wulou Peak and facing the blue East Sea. The entire school occupies 1,500 acres of area. There are 210 thousand square meters of building space. A new 19,000 square meter chemistry building and a 14,000 square meter library building are currently under design and construction. The school library owns more than 1.03 million volumes of books and periodicals, including more than 600 thousand Chinese books, over 220 thousand foreign books, more than 80 thousand volumes of over 4 thousand kinds of Chinese newspapers and magazines, and more than 60 thousand volumes of over 2 thousand kinds of foreign newspapers and magazines.

Xiamen University has its own affiliated precision machine plant, electronic plant, chemical plant, printing plant, and farm. In addition, it has the Jianuan Auditorium which holds 5 thousand people, as well as a large athletic field of over 100 thousand square meters, an indoor gynasium, and a coastal swimming pool, which provide good conditions for teaching, research and the quality of life of for faculty and students.

Xiamen University has a history of 60 years. It has already developed more than 20 thousand college graduates and 176 graduate students for our country. Some of them have already become the high level special personnel with significant accomplishments. For example, in our country, the present vice president of Fudan University and a famous semiconductor physicist Xie Xite, the vice president of Sichuan University and a famous mathematician Ke Zhao, the vice president of Shandong Oceanography Institute and a genetics expert Fang Zongxi, the chief of the aquatic biological research institute of China Academy of Science Wu Xianwen, the chief of the (Qindao) Oceanography Research Institure of China Academy of Science Zeng Chengkui, the chief of Fujian Material Structure Research Institute and the vice president of Fuzhou University Lu Jiaxi, the consultant to the Central Party School of the Chinese Communist Party Chen Kangbai, and the vice president of the Chinese Social Science Institute and an economist Xu Dixing, etc., as well as out of our country, an American biology Ph.D. and the chairman of the aquatic product department in the University of Maryland Gu Ruiyan, the American physician and the chairman of the anatomy department of Oklahoma State University Li Jingjun, and the honorary professor of Xiamen University in its earlier years. In the 30 years since the the country was founded, Xiamen University has also developed many outstanding graduates. Some of them have already become famous professors, educators, and scientists. Some of them even became the backbone leadership in the central and local education, research, and production organizations. The famous mathematician Chen Jingrun was a graduate of Xiamen University in 1953.

Xiamen University is presently under the jurisdiction of the Ministry of Education.

School Anniversary Date: April 6th

Current President and Secretary of Party Committee: Zeng Ming

/158

Oversea Chinese University

School Address: East Suburb of Quanzhou, Fujian

Oversea Chinese University was founded in the fall of 1960 for the convenience of oversea Chinese youth to return to our country to further their studies. The school was decided to be a comprehensive university back then. It belonged to the leadership of the Oversea Chinese Affairs Committee of the People's Republic of China. The program was five years (the medical treatment special field in the medicine department was six years). The school buildings were built from the ground in the east skirt of the city of Quanzhou in Fujian. The campus occupies over 700 acres of land.

In the fall of 1960, the Oversea Chinese University accepted students in the special field of Chinese Language and Literature in the department of Chinese. Classes were held temporarily at Fujian Normal Institute. In the fall of 1961, the school added the mathematics department applied mathematics special field and the chemistry department chemistry special field. Classes were held at the Jimei Oversea Chinese Tutoring School in Xiamen. As the school buildings were gradually completed, the faculty and students who resided in other places returned to attend classes in Quanzhou. It again added the political department political education special field, the physics department physics special field, and the tropical crops department tropical crops planting special field. Between 1963 and 1965, the school gradually added the medicine department medical treatment special field, the civil engineering and construction department industrial and civilian building special field and farmland irrigation special field, the chemical engineering department inorganic chemical engineering special field, and basic organic synthesis special field, and the foreign language department Indonesian special field, English special field, and Japanese special field.

Until the fall of 1965, including the department of arts in Beijing, the entire school had a total of 11 departments and 15 special fields. The number of students was approximately over 2,300. Until the summer of 1966, the school had a total of 228 graduates in two classes.

Along with the development of the school, the number of faculty, staff, and workers also increased correspondingly. Until 1966, the number of teachers at Oversea Chinese University reached more than 480. There were over 340 cadres and staff members.

In the meantime, the school building construction, and the library collection and instruments were also developed correspondingly. Until 1966, there were nearly 90 thousand square meters of building space already constructed. The majority of the buildings was 4 story buildings with granite steel reinforced concrete structures. A total of over 300 thousand volumes of books had been acquired. There were more than 14,200 periodicals. Among them, there were 20 thousand volumes of foreign books and periodicals. Furthermore, several dozens of laboratories in science, engineering, medicine, and agriculture, and a foreign language audiovisual class room were constructed. It also had a printing shop, a water plant, an elementary school, a kindergarten, as well as other fringe benefit installation.

At that time, 90% of the students at the Oversea Chinese University came from 17 countries and regions in southeast Asia. Among them, the majority came from Indonesia. Most of the Oversea Chinese young students loved the socialist homeland. They studied hard. They had good foundations in foreign languages. They were active in activities in arts and athletics. In the athletic competitions and recreational activities among the higher learning institutions in the province of Fujian, the school was in front many times. It was repeatedly praised. The students accepted by the school over the years, regardless of whether they completed the five year learning period and graduated or they were assigned jobs before they finished their studies due to the ten year period of chaos, worked at various

posts to join in the socialist construction work in our country. Later on, some of them gradually returned to Hong Kong, Macao, or their original residence to work. Most of them worked out very well. They were positively effective to the construction of our country, the cultural exchange between China and foreign countries, and the improvement of friendly relationships with oversea Chinese abroad.

In 1966, Oversea Chinese University stopped all the classes. In 1969, it was abolished. Most of the teachers and officials were sent down to perform labor work. The books and equipment were divided among other higher learning institutions. The school buildings were given to Fujian Medical School. The school property and furniture were lost in countless numbers.

In the spring of 1978, the State Council decided to restore the Oversea Chinese University. The special fields offered are centered around engineering. It combined science with engineering. The school system was four years. It accepts oversea Chinese and young people from Hong Kong and Macao. In the meantime, it also accepts some students domestically.

The Oversea Chinese University currently has 6 departments and 7 special fields.

Mathematics Department Applied Mathematics Special Field Computer Software Special Field Chemistry Department Chemistry Special Field Civil Engineering Department Industrial and Civilian Building Special Field Physics Department Physics Special Field Chemical Engineering Department Chemical Engineering Special Field Mechanical Engineering Department Mechanical Manufacturing Technology, Equipment, and Automation Special Field

Since 1980, Oversea Chinese University adopted a method to individually prepare the examination to conduct the test and announce the results early with respect to accepting oversea Chinese students and students from Hong Kong and Macao.

**Oversea** Chinese University had more than 800 students in school in 1980. There were 822 faculty and staff members, of

which 392 were full time teachers. Among the full time teaching staff, there were 5 professors and associate professors, 210 lecturers, 68 teachers, and 109 assistants. In addition, it also retained 4 foreign professors to lecture on a short term basis. Four people made academic reports on their trips back to visit their families.

In the past three years, Oversea Chinese University acquired a number of instruments, equipment, books, and data. It already has 180 thousand volumes of books, of which 40 thousand volumes are foreign original books gifted by oversea Chinese or fellow countrymen in Hong Kong and Macao, or imported using foreign currency. Over 2,000 kinds of scientific and engineering periodicals and information materials in and out of the country have been newly subscribed. It has preliminarily constructed 29 fundamental laboratories in science and engineering. The audi-visual classroom donated by the Oversea Chinese has already been placed in use. In addition, the school also introduced a PDP11/34 small electronic computer system and a number of microcomputers. The computer station and the mechanical plant of the school are under construction.

In recent years, Oversea Chinese University newly constructed nearly 30 thousand square meters of building space. Including the buildings completed before it was terminated, there are a total of over 110 thousand square meters of space. The memorial hall for Mr. Chen Jiageng was donated by patriotic oversea Chinese. It has already been constructed beginning in 1980. Presently, Oversea Chinese University is still expanding.

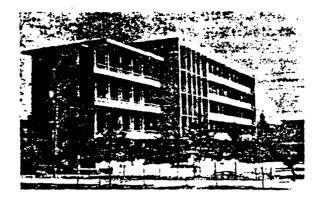
Oversea Chinese University is presently under the jurisdiction of the Ministry of Education.

School Anniversary Date: November 1st Current President: Liao Chengzhi (part time) Secretary of Party Committee: Cai Li (part time)

/159

Fuzhou University

School Address: West Suburb, Fuzhou Fujian

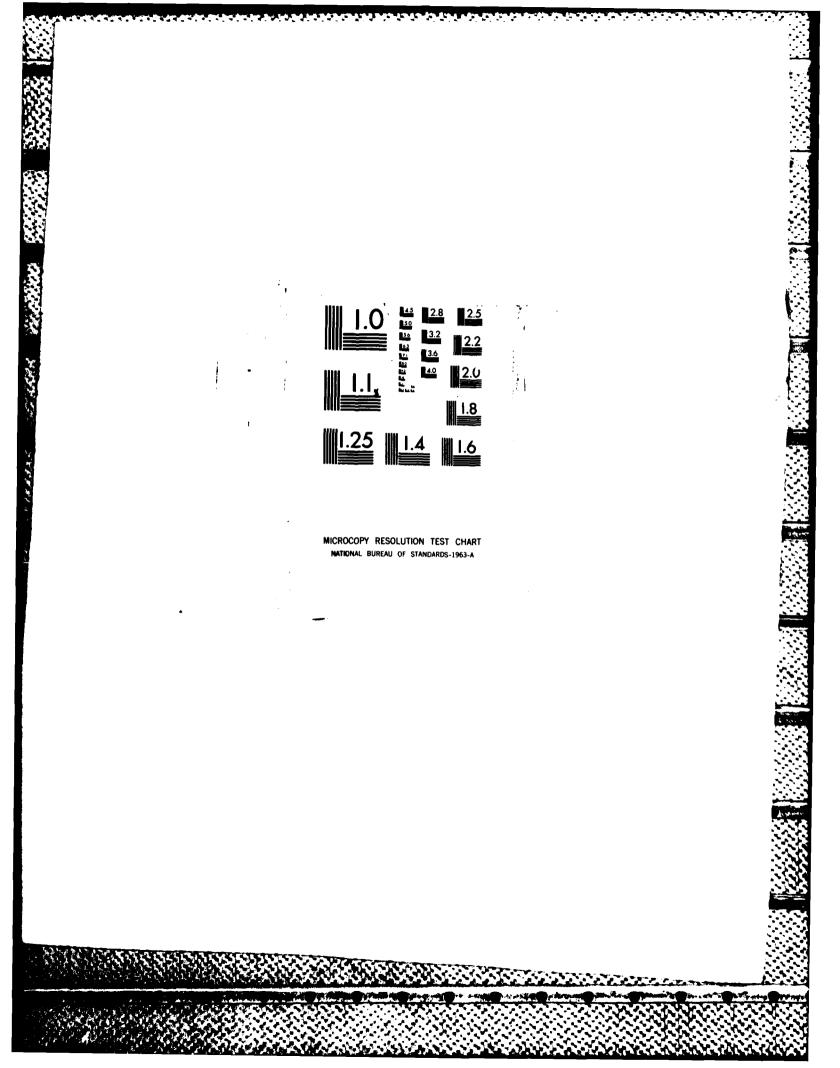


The Lecture Hall of Fuzhou University

Fuzhou University was founded in 1958. When it was first established, the Secretary of Party Committee of the Chinese Communist Party in the Province of Fujian Jia Jiumin was the president. Wu Liqi was the Secretary of Party Committee.

When Fuzhou University was in its planning stage, it was envisioned to build the university as a comprehensive school in science and engineering. The campus was located on the west skirt of Fuzhou. It occupies 2 thousand acres. At that time, using a part of the special fields and specializations of Xiamen University as the foundation, Fuzhou University had 9 departments in mathematics, physics, chemistry, mechanical engineering, electrical engineering, chemical engineering, radio engineering, civil civil engineering and construction engineering, and mining and metallurgical engineering. They were further divided into 17 special fields in mathematics, computational mathematics, physics, radio technology, mechanical manufacturing technology, and equipment, casting, power plant, electrical network and electrical system, electrical machine and electrical appliance, inorganic chemical engineering, basic organic synthesis, industrial and business electrification, mechanics, industrial and civilian buildings, roads and bridges, mining engineering, and metallurgical engineering. During the three year period of difficulties, Fuzhou University reduced its scale. The campus area was reduced to over 300 acres. The departments were reorganized. The

| HD-A137 587 BRIEF INTRODUCTION TO HIGHER EDUCATION INSTITUTIONS IN<br>CHINA(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH<br>12 JAN 84 FTD-ID(RS)7-1082-83 |       |       |   |      |  |     |  |              |  |              |  | 9          |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|---|------|--|-----|--|--------------|--|--------------|--|------------|--|--|
| U                                                                                                                                                              | NCLAS | SIFIE | 0 |      |  |     |  |              |  |              |  | F/G 5/9 NL |  |  |
|                                                                                                                                                                |       |       |   |      |  |     |  | <b>B</b> X.4 |  |              |  |            |  |  |
|                                                                                                                                                                |       | 54    |   |      |  |     |  | ×            |  |              |  |            |  |  |
|                                                                                                                                                                |       |       |   |      |  |     |  |              |  |              |  |            |  |  |
|                                                                                                                                                                |       |       |   |      |  |     |  |              |  | 1944<br>1944 |  |            |  |  |
|                                                                                                                                                                |       |       |   | 1    |  | 200 |  |              |  |              |  |            |  |  |
|                                                                                                                                                                |       |       |   | inhe |  |     |  |              |  |              |  |            |  |  |
|                                                                                                                                                                |       |       |   |      |  |     |  |              |  |              |  |            |  |  |
| 2                                                                                                                                                              |       |       |   |      |  |     |  |              |  |              |  |            |  |  |



chemistry department and the chemical engineering department were merged. The physics department and the radio engineering department were consolidated. The civil engineering and construction engineering department, and the mining and metallurgical engineering department were abolished. Five departments and 10 special fields were preserved (the last 6 special fields in the aforementioned 17 special fields were abolished. The computational mathematics special field was merged into the mathematics special field to become 1 specialization). Although the scale of the school is smaller, yet it is still a science and engineering university.

During the ten year period of chaos, Fuzhou University did not accept any students from 1966 to 1969. In 1970, because Oversea Chinese University and Fujian Normal Institute were terminated, the civil engineering and construction engineering department of Oversea Chinese University was merged into Fuzhou University. Three special fields in industrial and civilian buildings, irrigation, and hydroelectric engineering, and roads and bridges were newly established. Using the departments of mathematics and physics of the original Fujian Normal Institute as the basis, it added the department of education, which has two special fields in mathematics and physics. In the meantime, the department of mining and metallurgy was reinstated. In 1973, Fujian Normal Institute was restored, and its name was changed to Fujian Normal University. The education department of Fuzhou University was transferred to the Normal University. In 1978, the Oversea Chinese University was reinstated. A part of the civil engineering and construction engineering department of Fuzhou University was transferred to the Oversea Chinese University. The other part still remained at the school to maintain the original system. In order to suit the needs in the development of the light industries in the province of Fujian, Fuzhou University also established the light industry department in 1978.

Presently the school has 8 departments and 25 special fields.

Mathematics Department Computational Mathematics Special Field Applied Mathematics Special Field Electronic Computer Software Special Field Electronic Computer Technology Special Field Physics and Radio Department Physics Special Field Radio Technology Special Field Chemical Engineering Department Basic Organic Chemical Engineering Special Field Inorganic Chemical Engineering Special Field Physical Chemistry Special Field Chemical Engineering Special Field Analytical Chemistry Special Field Mechanical Engineering Department Mechanical Manufacturing Technology Equipment and Automation Special Field Metallic Material and Heat Treatment Special Field Casting Special Field Light Industry Department Light Industry Machinery Special Field Food Technology Special Field Food Packaging Technology Special Field Mining and Metallurgy Department Regional Geological Survey and Mineral Survey Special Field Coal Mining Engineering Special Field Civil Engineering and Construction Engineering Department Industrial and Civilian Building Special Field Irrigation and Hydroelectric Engineering Construction Special Field Roads and Bridges Special Field Electrical Engineering Department Electrical Machine and Electric Appliance Special Field Industrial Electrification and Automation Special Field Power Plant and Electrical System Special Field The above fields are four years. Although Fuzhou University belongs to one of the newly es-

tablished universities after the country was founded, yet the foundation of the teaching team is relatively good. The various departments in science were centered around Professor Lu Jiaxi who was the vice president and dean of the school of science at the original Xiamen University. Many of them were the backbones of the original Xiamen University. The teaching strength of the related departments in engineering was further supported by many institutions such as Zhejiang University, Tongji University, Harbin Polytech University, etc. Presently, Fuzhou University has 2,264 faculty and staff members. Among them, there

/160

are 1,175 teaching staff (965 full time faculty members). On the full time teaching staff, there are 12 professors, 48 associate professors and 605 lecturers.

Since 1977, Fuzhou University resumed accepting undergraduate students and graduate students. In 1980, there were 4,511 students in school. Compared to the maximum number of students before 1966, the number of students increased by 55%. There were 34 graduate students.

During the initial period, Fuzhou University had established a material structure research institute and a centralized laboratory. Later on, the material structure research institute was placed under China Academy of Science. The centralized laboratory was led by the province of Fujian. Currently, the school has has an automation research institute, an electronic computer software research office, and a chemical fertilizer research office. There are 43 full time research personnel and auxiliary staff. In addition, there are 16 research offices and 1 research group affiliated with the various disciplines and special fields. In the past three years, Fuzhou University has obtained 70 items of research results. Among them, the chemical engineering department received the advanced group award in the National Scientific Meeting. Projects such as the optimization of the total machine structure using mathematical programming, the serial design of rakes for the dry fields in the north, and the serial design of wet rice field ploughs received the cooperative accomplishment awards in the National Scientific Meeting. Twentyseven projects, including the new highly efficient x-ray diffraction crystal TLAP received the accomplishment awards in the Scientific Meeting of Fujian. In addition, there were 27 projects receiving the cooperative accomplishment awards in the Fujian Scientific Meeting.

Fuzhou University presently has 63 laboratories. The school library has a collection of 600 thousand volumes of books. Among them, there are 160 thousand volumes of foreign books. In addition, it has more than 4,000 kinds of bound volumes of periodicals and magazines. The school publishes ((Journal of Fuzhou University)) (natural science newspaper) on an irregular basis.

It is distributed internally. The civil engineering and construction engineering department also edits and publishes ((Selected Translations in Civil Engineering and Construction)). It is an irregularly published publication for the exchange of academic information.

Fuzhou University presently has its own school operated machine shop and printing shop. In addition, there are a department operated radio factory, a chemical plant, an electrical device control equipment plant, and a hydraulic part factory. In addition to accomplishing the duty of teaching and practice, they are capable of producing relatively high technology products such as the model SXX-1 color cardiograph diagnostic apparatus, the thyristor diesel engine, the oil pump test platform, etc.

Fuzhou University presently occupies 422 acres of land. It currently has close to 120 thousand square meters of building space.

Since its founding, Fuzhou University has delivered 8,145 graduates to the nation.

Fuzhou University is presently under the jurisdiction of the People's Government.

Current President, Secretary of Party Committee: Huangpu Lin



JIANG XI PROVINCE

Jiang Xi University

Campus Address: Number 4, Jiao Tong Road, Nan Chang City, Jiang Xi Province

Jiang Xi University was founded in 1958. At that time, workers and staff, brothers from inside and outside the province, were being supported by the campus (TN: lit-school grounds). Until 1965, the entire campus had already acquired more than 2,600 workers and staff members. Among them were 11 professors and 7 assistant professors, and 2,000 students; the premise's facilities occupied in excess of 50,000 square meters. There were over 600,000 publications on hand, and instrument equipped facilities were developing on a comparable scale.

During a decade of turmoil, Jiang Xi University stopped enrolling students for 7 years. From 1968 to 1972 the school was abolished. All of the teachers and cadre of the school were demoted and sent to the villages to work as laborers. The school's premises, publications, instructional instruments, and production capacity became a total loss. In 1969, the school's Physical Science Specialty Department and the Jiang Xi Industrial School merged. The name was changed to the Jiang Xi Physical Science and Industrial College. The Arts Department became the Jiang Xi Teacher's College, and the name was changed to the Jing Gang Mountain University of Jiang Xi. In 1972, the Jiang Xi Physical Science and Industrial College and the Jing Gang Mountain University of Jiang Xi were abolished. The administrative organizations were restored as the Jiang Xi University, the Jiang Xi Industrial Institute, and the Jiang Xi Teacher's College. The previously demoted teachers were transferred back in a continuous succession. There have been several developments since the re-establishment of

Note: TN = Translator's Note.

477

U. a. Carl and a Carl and a Carl

Jiang Xi University. In recent years, after going through a complete reorganization, teaching and research have been progressively developing in a healthy, orderly manner.



Jiang Xi University's Main Building

Jiang Xi University currently has 9 departments and 17 academic specialties. Each department program is arranged on a 4 year educational system.

> DEPARTMENT OF PHILOSOPHY Philosophy Specialty

DEPARTMENT OF CHINESE Chinese Literary Specialty

DEPARTMENT OF FOREIGN LANGUAGES English Language Specialty

DEPARTMENT OF ECONOMICS Government Economics Specialty

DEPARTMENT OF HISTORY History Specialty

DEPARTMENT OF MATHEMATICS Computer Science Specialty Mathematics Specialty

478

DEPARTMENT OF PHYSICS

Wireless Radio Physics Specialty Semi-Conductor Physics Specialty Metal Physics Specialty

DEPARTMENT OF CHEMISTRY

Organic Chemistry Specialty Analytical Chemistry Specialty Physical Sciences Chemistry Specialty Inorganic Chemistry Specialty

DEPARTMENT OF BIOLOGY

Biological Sciences Specialty Microbiology Specialty Fresh Water Hydroponics Specialty

In 1980, Jiang Xi University had 2,715 students enrolled and 11 research students. Currently, there is a staff of 375 people, of which 473 people occupy teaching positions. Among the teaching positions on the staff are 21 professors and assistant professors. There are 247 lecturers.

Recently, many research articles from Jiang Xi University have received commendation from the National Science Committee and Jiang Xi Province (TN: refers to the provincial govt.). Among these articles are Professor Dai Zhi Zhong's essay entitled ((Results of Numerous Theoretical Evaluations)), articles on ballistic missile telemetry, agricultural research on oyster bed dispersion, a biological study of Japanese bamboo infestation and research on its prevention and control, etc.

In regards to published works, Jiang Xi University has published several books in recent years. Chief among these are History Professor Ru Qing Guang's work entitled ((A Critical Examination of the Governmental Military System))(Hardcover Edition), ((Collective Essays on the History of Ancient Chinese Economics)), the Chinese Department's Assistant Professor Zeng Yi Bian's work entitled ((Readings in Poetry)), Assistant Professor Zhao Pian Jian's compiled works ((Selections of

479

Foreign Lyric Poetry)), the Chinese Department's collectively written work ((An Explanatory Translation of Classical Poetry that Embraces the Revolutionary Dream)), Biology Department professors Sen Ying and Cheng Liang Fu's jointly written book entitled ((A Management Guide for the Grouping and Classification of Flora)), and Cheng Dan Ru's work entitled ((Agricultural Produce Infestations and Their Control)), etc.

Currently, Jiang Xi University has 32 laboratories equipped with Model CJ-709 electronic computers, elliptical laser measurement instruments, spectrum analysis equipment, differential heat analysis equipment, flourescent microscopes, as well as closed circuit televisions and other apparatus.

The Jiang Xi Tibrary currently has a collection of over 50,000 Chinese and foreign texts. There are over 14,000 periodicals. This school is also affiliated with an electronic instrument factory, a biological products plant, and a printing house.

Jiang Xi University occupies an area of 424 mu (TN: one acre is 6.6 mu) with constructed facilities on campus that occupy more than 80,000 aguare meters.

Since Jiang Xi University's inception, there have been a total of 5,836 students graduated. Jiang Xi University is currently under the leadership of the People's Government of Jiang Xi province.

Present School Administrator: Ha Jie Guang Party Committee Secretary : Zhang Zheng Rui Jiang Xi Agricultural University

Campus Address: Lower Jiao Mei Ling Suburban Area, Nan Chang City, Jiang Xi Province

The Jiang Xi Agricultural University, originally named the Jiang Xi Communist Workers College, was established on August 1, 1958. At that time, it was a half-work half-study (TN: idiom) village school of higher learning. It was set up with general and specialty schools. The general school was under the leadership of Jiang Xi Province, with the primary purpose of cultivating a great number of vocational students. Throughout the entire province was over a hundred specialty schools, organized under county leadership. (TN: specialty schools are similar to extension schools) Emphasis was in the general specialties or moderate technology. The Jiang Xi Communist Workers College had been established just about three years when Chairman Mao Ze Dong wrote a letter (of commendation) to that school.

With the initial founding of the Jiang Xi Communist Workers College there were 7 specialties established. They were agriculture, horticulture, forestry, animal husbandry and veterinary science, mountainous area industry, studies in socialism, and principles of mathematics. Throughout reorganizations in the years following, until 1965, the school was organized to have specialties in agricultural economics, forestry, animal husbandry and veterinary science, agricultrual machinery, and horticulture as well as technological research in artificial forestry and political theory classes. There were over 240 teachers and more than 2,000 students in the school.

During the decade of turmoil, the Jiang Xi Communist Workers College stopped student enrollment for 4 years. In 1969, the Jiang Xi schools were abolished, and, simultaneously, so was the Jiang Xi Communist Workers College.

The precursory organization of the Jiang Xi Agricultural schools, before the liberation, was the Zhong Zheng University and Agricultural School. After Nan Chang was liberated in 1949, the name was changed to the Nam Chang University and Agricultural School. In 1952, the National Administrative System for Institutions of Migher Learning was reorganized and the Nan Chang University was closed down. The Jiang Xi

Agricultural College was established and was integrated with three other schools from Guang Xi, He Nan, and Hu Nan to form an agricultural college with a specialty program in veterinary sciences. As a result of this, the Jiang Xi Agricultural College's Animal Husbandry and Veterinary Sciences Departments were strengthened significantly both in faculty and experimental equipment. It became a focal point for agricultural and forestry specialties for the whole country. Also, the integration of the Jiang Xi Agricultural College and the Jiang Xi Communist Workers College made the entire school system even stronger.

In 1977, with the approval of the State Council, the Jiang Xi Communist Workers College was enumerated as a key institution of higher learning. In 1979, the entire school system became the Jiang Xi Communist Workers University, a full time institute of higher learning. It made practical use of the common, standardized lesson plans of advanced agricultural and forestry schools, and enrollment programs for research students were restored. In 1980, the Jiang Xi Communist Workers University changed its name to the Jiang Xi Agricultural University.

The Jiang Xi Agricultural University currently has 5 organized departments with 8 specialties. In addition, there is a basic education branch, a Marxism study and research center, and a gymnastics training center.

> DEPARTMENT OF AGRICULTURE Cultivation Specialty Plant Protection Specialty Seed-Genetics Specialty

> DEPARTMENT OF FORESTRY Forestry Studies Specialty

DEPARTMENT OF HORTICULTURE Horticultural Studies Specialty

DEPARTMENT OF ANIMAL HUSBANDRY AND VETERINARY SCIENCES Animal Husbandry Specialty Veterinary Sciences Specialty

DEPARTMENT OF AGRICULTURAL MACHINERY Agricultural Machinery Specialty

General or undergraduate courses are organized in a four year program. Research study programs are organized for 3 years. In 1980, the whole school had 1,909 students in attendance. Among them were 6 research students, 1,582 undergraduate students, 17 experimental study group students, and 304 students from communes. Among the teachers of the specialties, there are 7 professors, 14 assistant professors, and 220 lecturers.

Jiang Xi Agricultural University presently has about 40 laboratories. The laboratories occupy an area of approximately 60,000 square meters. Currently under construction is a basic experimental studies building that will occupy about 4,000 square meters. The school has established 11 agricultural, forestry, animal (husbandry), horticultural, and agricultural machinery fields, factories, or units. It is also affiliated with younger generation schools and a child care center.

Jiang Xi University has recently assumed a central role, along with the Jiang Xi Provincial Scientific Research Unit, in the generation of 64 briefs. In 1978, during the National Science Committee meeting, 2 of this schools research briefs received awards.

The Jiang Xi Agricultural University has edited and compiled for publication the ((Jiang Xi Communist Workers University School Paper)) (qtrly). Since 1981, the name has been changed to the ((Jiang Xi Agricultural University School Paper)).

The Jiang Xi Agricultural University library has a collection of books that numbers approximately 230,000 volumes. Additionally, there are over 1,000 different types of periodicals.

The Jiang Xi Agricultural University currently occupies 845 mu, and the constructed facilities occupy an area in excess of 100,000 square meters.

Since the liberation 31 years ago, the Jiang Xi Agricultural University (including the Jiang Xi Communist Workers College and the

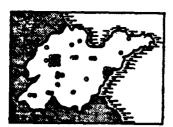
Jiang Xi Agricultural College) has, for the nation, cultivated at rooimately 12,500 agricultural specialists.

Jiang Xi Agricultural University is presently under the leasership of the People's Government of Jiang Xi Province.

Commencement Date: August 1

School Administrator and Party Secretary : Lou Chao

> مرز با مرز با



Shan Dong Province

Shan Dong University

Campus Address: Ji Nan City, Shan Dong Province

Shan Dong University was founded in 1926. It was originally established by Shan Dong Province and 6 academic specialties merged into the curriculum: agriculture, industry, mining, medicine, French, and commerce. Initially a provincially established university, in 1928 it became a nationally established university. The school was originally located in Ji Nan. In 1930 it was moved to Qing Dao and took into receivership the property of the privately owned Qing Dao University. It became the nationally established Qing Dao University. Later, the name was again changed to the nationally established Shan Dong University.

Prior to 1937, Shan Dong University had only 3 institutes of higher learning (TN: academic school branches) with 500 students. When the eruption of the War of Resistance Against Japan occurred, Shan Dong University moved to Si Chuan and became Central University. After the victory in the War of Resistance Against Japan, the school moved back to Qing Dao. After its return, Shan Dong University expanded on a much larger scale than before. It established 5 institutes of higher learning with specialties in literature, theory, industry, agriculture, and medicine. There were approximately 1,000 students.

Qing Dao was liberated in 1949 and Shan Dong University fell under the leadership of the People's Government. A path of healthy development began. In 1951, Hua Dong University, from a previously liberated region, moved to Qing Dao and merged with Shan Dong University. After the merger, Shan Dong University still had 5 institutes of higher learning, but with 18 departments specializing in government, the arts, Chinese, foreign languages, history, mathematics, physics, chemistry, mining, zoology, botany, agricultural machinery, generators and motors, civil engineering, farming, horticulture, plant protection, and aquatic production as well as having two research sections specializing in historical literature and oceanographic physics. The student population expanded to more than 2,000.

In 1952, there was a re-organization of all of the departments in institutes of higher learning throughout the country. Shan Dong University did away with the system of institutes of higher learning. Because of the basic foundation of courses in literature and theory. the two were combined in an integrative spirit at the university. Following departmental re-organization, the departments of agriculture, industry, and medicine, as well as those of gevernment, the arts, mining, etc. and other departments from other schools merged. Some became independent institutions. At this time, Qi Lu University was abolished, and a portion of the Qi Lu University's Literature Department integrated with the Shan Dong University. In 1950, the Shan Dong University moved back to Ji Nan. The departments left behind, oceanography, aquatic production, geology, etc. established the Shan Dong Oceanographic Institute in its place.

Shan Dong University has an honorable and glorious revolutionary



An outside view of the Shan Dong University Teaching Hall.

tradition. Before the liberation, the tmachers, students, and workers advanced the struggle against the Nationalist Party's rule. In the early twenties, when Luo Rong Xiang was studying at Qing Dao University, he led the students in promoting the opposition to the encroachment of imperialism and the opposition and struggle against the dark period of rule of the warlords; later, the 1931 "Incident of September 18th" and the "December 9th" Japanese Resistance movement in 1935, the internal struggle of 1947, the anti-hunger movement, the anti-persecution movement, and, in 1949, the celebration of Qing Dao's liberation, etc. Shan Dong University's teachers and students progressed under the leadership of the Communist controlled party, with both the Party and the school moving on an unyielding and unswerving path to endeavor in the struggle for advancement. Hua Dong University, in the liberated region, was directly established as the communist party's Revolutionary University. With an abundantly rich and glorious revolutionary tradition in the struggle for liberation, and the reconstruction of the newly liberated areas, it brings into full scope the practicality of the many awards received.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Shan Dong University has historically been one of the leading universities of our country. In and out of country, it has a definite influence on academic and technological boundaries. There are more than a few famous specialists and scholars. For example: literature and history scholars Chang Zhen Sheng, Wang Tong Zhao, Gong Shen, Wen Yi Duo, Lao She, Ji Gan Ru, Feng Yuan Jun, Ding Shan, Huang Yun Mei, Ji Tong Shuang, Chang Xiang Zou, Tong Shu Ye; science scholars Ding Xi Lin, Tong Di Zhou, Wang Jin Chang, Zhuan Niao, Xiang Zuo Ying, Chang Hu Bao, Ceng Cheng Zou, Wang Pu, Li Xiang, Li Zun Xian, etc., all of whom have, in the past, taught at Shan Dong University. The younger generation literary scholars of late, Shen Cong Wen and Xiao Bo Xiao, also held working and teaching positions at Shan Dong University. Now in America, John Hu Bu Jin (TN: transliterated last name), a respected scholar, earlier this past year, was also a professor at Shan Dong University.

After the liberation, the People's Government choose to send well known specialists and scholars to Shan Dong University to assume positions of responsibility as school administrators. The first person to assume the responsibility of school administrator was Party Theorist and history scholar Hua Gang. Later, educators from the Party to assume the position were Huang Zhe Pu and Cheng Fang Yu. Tong Di Zhou, Ji Gan Ru, Huang Yun Mei, and other well known professors held the position of assistant school administrator.

After Shan Dong University's liberation, because of the merger with Hua Dong University, there was an increasing new student population, and also created was a new style of study. When Shan Dong University was first established, the study methods were much along the lines of those at Bei Jing University. Great importance was attached to democracy, advocating freedom of academics. In teaching, however, the greatest emphasis was placed on the study of basic theories and elementary training. Hua Dong University carried forward the excellent revolutionary tradition of the Party, emphasizing practical necessities, theory being put in connection with reality, and having the spirit to overcome difficult struggles. After the merging of the two schools, they sufficiently overcame their mutual weaknesses by learning from each other, and promoted a tradition of working excellence. Academic thinking is relatively lively, promoting different schools of thought, different academic points of view in debate, and daring to try something new. There have been many beneficial contributions that favorably changed the academic boundaries or limitations of the country. This type of fine spirit is returning and being promoted at present.

Since the establishment of Shan Dong University, it has cultivated many well known personalities. For example, the poet Zang Kuang Jiu, the Chinese science section's section chief Zhuang Li Sui's research work on cellular biology, the American University professor Ao Li Zhou Li (TN: transliterated name, tnx unk), Zhou Atomic Research Center Director Jiang Shi \_\_\_\_(TN: char. illeg.). After liberation, the Arts and Science Department students did research concerning the questions raised in the book ((Hong Lou Meng)) and received the praise of Chairman Mao Ze Dong.

In the thirty years after the establishment of modern China, Shan Dong University has, in regards to teaching and scientific research, achieved many comparatively great accomplishments. The school has produced more than 20,000 students for the country. They have endured in the un-ending struggles for socialist reconstruction in a socialist nation. Many among them have become the core or mainstay of strength on this battlefront in the struggle. For example, our country's brilliant, middle aged mathematics scholars, who have, in very short time, returned to the mathematics department as professors, just as many other brilliant graduates had returned to Shan Dong University after the liberation to take similar positions. In addition to this, the school has produced many exchange student graduates from other countries.

Shan Dong University has advanced on a very circuitous path since its establishment. Especially noteworthy is the period during the Decade of Turmoil. Schools were beset with suffering, trampled over, and, for a time, broken up and scattered, and suffering from incurred

488

financial losses; the Decade of Turmoil caused many setbacks, and the quality of education was greatly reduced. After crushing the "Gang of Four", and especially since the Party's November 3rd session of National Committees, after going through the eradication of the turmoil, restoration, re-organization, etc., teaching and research activities are once again on the right track. There have been many new developments in the school's endeavors.

Currently, Shan Dong University has a total of 12 Departments and 25 specialties.

> DEPARTMENT OF CHINESE LANGUAGES Chinese Language Specialty

DEPARTMENT OF PHILOSOPHY Philosophy Specialty

Access 1 4 Leven

DEPARTMENT OF ECONOMICS Government Economics Specialty Economics Management Specialty

DEPARTMENT OF SOCIAL SCIENCES Social Sciences Specialty Legalists Specialty Student enrollment

Student enrollment starting in 1982

DEPARTMENT OF HISTORY History Specialty Archaeology Specialty World Affairs Specialty Studen stanti

Student enrollment starting in 1981.

DEPARTMENT OF FOREIGN LANGUAGES English Language Specialty Japanese Language Specialty Russian Language Specialty T

Temporarily not enrolling students

DEPARTMENT OF MATHEMATICS Mathematics Specialty

Computer Mathematics Specialty Theories of Control Specialty Computer Science Specialty Scientific and Technological student enrollment Information Specialty began in 1981

DEPARTMENT OF PHYSICS Physics Specialty

DEPARTMENT OF ELECTRONICS Radio Electronics Specialty Principles of Wireless Radios Specialty

DEPARTMENT OF SPECTOGRAPHY Spectroscopic Technology Specialty

DEPARTMENT OF CHEMISTRY Chemistry Specialty

DEPARTMENT OF BIOLOGY Zoological Sciences Specialty Botanical Sciences Specialty Microbiological Sciences Specialty

In 1980, Shan Dong University had 4,395 undergraduate students, 358 students enrolled in specialists courses, 193 research students, 12 foreign exchange students, and 268 advanced studies students. The total figure of students in school was approximately 5,226. This figure is 5 times that of the pre-liberation era. Compared to the time before the Decade of Turmoil, it has increased 25%. Study programs for undergraduates are limited to 4 years. Specialists programs are limited to three years, research students have a three year program, and staff research programs are limited to five years in length.

Shan Dong University has six research facilities attached to the school. They are the Literature, History, and Philosophy Research Center, the Modern American English Research Center, the Mathematics Research Center, the Crystalline Materials Research Center, the Nicrobiology Research Center, and the Remote Infra-red imagery Research

490

Center.

States and the second states and a

The Chinese language specialists of Shan Dong University's Arts Department, along with the history specialists, have had a long standing tradition of carrying out research for every stage of history. From the ancient feudal Chun dynasty, the two Han dynasties, the Wei, Jin, Nan, Bei, Chao dynasties, the five dynasties of the Sui Tang era, to the Song, Yuan, Ming, and Qing dynasties, right up to modern times, and each department has its own unique, distinctive features. For example. Professor Gao Xiang's studies of ancient classical compositions (TN: musical) and studies in ancient philosophical and literary works; Professor Xiao Tiao Fei's studies of ancient Chinese classical musical poetry, Professors Tang Qing, Ou Fu Shi, and Yin Meng Lun's studies in ancient Chinese language and lexicon, Professor Wang Chong Ye's study of the Wei, Jin, Nan, Bei, Chao, and Sui Tang dynasties history, Professor Zhang Shei Hua's studies of ancient Chinese classics and the history of Chinese-Western communications. Professor Guan Ji Sheng's works on Nodern Chinese history and the basic catalogue and registry of ancient Chinese publications. All of these people have achieved very high standards in the country.

In regards to research on modern American literature, Shan Dong University has been conducting such research work for approximately 20 years. In this aspect, within the country, the research work began to develop very early. This unit has conducted a great deal of research. Professors Huang Jia De and school administrator Wu Fu Heng both participated in this type of research work. Articles of modern American research in literature are translated and sent for publication to the relevant journals. It has been a great practical application of the successful Chinese and American literary communications (literary) of late. In August of 1979, our country established the Chinese-American Literary research committee. Wu Fu Heng was elected as the chairman of that committee. The school's modern American Literary Research Department was responsible for the committee's routine secretarial work for all of the committee members.

In addition to Shan Dong University's science department, mathematics divisions, physics department, and chemistry department, there is also the well established oceanography and biology departments. After the school moved back to Ji Nan, based on the new conditions, there were many new and important advances in research. For example,

491

Professor Na Zhi Cheng's studies of magnetism, Professors Li Mian Zheng and Huang Ye's theory of functional mathematics, Professor Zhang Xue Ming's Differential and Integral Calculus Control Theory, and studies in microbiology by Professor Wang She Nong, advanced studies in the analysis of botanical morphology, and Professor Cu Shu Yi's studies in pre-natal vertebrate embryogeny. All of these people have achieved outstanding results. In addition to the outstanding accomplishments of these well known professors, there is also a group of young professors that are very quickly up and coming. The school's young mathematics scholar, Professor Pan Cheng Dong, who has achieved brilliant accomplishments in analytical mathematics theory. In research, the postulations of Ge De Ba (TN: Char. illeg.) have gained a leading position of prominence throughout the world.



A teacher leading students in microbiological research at Shan Dong University.

Various aspects of research, such as crystalline materials, theories of control, basic particle and quantization chemistry, remote infra-red imagery, and microbiology are some of the distinctive characteristics of this school's Science Department. In recent years its development has been very fast. The crystalline materials research section has produced and developed some thirty-odd various types of crystalline materials for applications in piezo-electricity, spectrographics, laser and non-linear, infra-red, etc. The results achieved have been good. Euch of the research conducted has achieved world prominence. For example, the research in potassium biphosphates and

neodynium potassium phospenes. At the 1970 National Science Conmittee meeting, some 20-odd research articles, such as those on crystalline materials, random number theory, covalent electron transfer, six position digital electronic voltmeters, etc., all received awards and commendations from the Science Committee.

ምም የቆግዲ የሚያት የሚያት የሚያት የሚያት የሚያት የ

Shan Dong University currently has a staff of 2,502 people. Among these are 1,150 teachers. Among the teachers are 42 professors, 113 assistant professors, 603 lecturers, and 389 assistant teachers or student aides. The figures for the teachers includes 132 members and staff of the 6 research branches. Additionally, there are seven instructors invited from other areas to come and work. Among the younger teachers, 53 people have been sent abroad for advanced studies.

Shan Dong University currently has a collection of over 1,500,000 books. Among these books are 1,250,000 Chinese books and 350,000 foreign books. There are subscriptions to 1,424 types of Chinese publications; there are 1,345 types of foreign publications (including previously published editions).

Shan Dong University currently publishes the ((Shan Dong University School Paper)) (published by the Science Department), the ((Literature, History, and Philosophy)) magazine, the ((Journal of Arts and Sciences Research Theory)), ((Nodern American Literary Research)), and various other periodicals.

This school is also affiliated with a semi-conductor materials factory, an electronics instruments factory, a metals factory, a publishing house, a zoological experimentation farm, a correspondence school, a part-time or off duty university, a kindergarden, and various other organizations.

The school presently occupies 1,025 mu. The school facilities occupy an area of 210,000 square meters.

Shan Dong University is currently controlled by the Ministry of Education.

Every year, prior to and through March 15th, the school convenes a scientific debate committee meeting, reviewing current scientific research accomplishments, and during the midst of this, has activities to celebrate the school anniversary.

> School Anniversary Festival: March 15 Current School Administrator: Mu Fu Meng Party Secretary: Sun Men Mu

> > Charles States and the second

The Shan Dong Oceanographic Institute Campus Address: Yu Shan Road.

Qing Dao City. Shan Dong Province

The Shan Dong Oceanographic Institute was established on March 30, 1959. It is our country's sole institute of higher learning that, as a school of Neo-Confucian philosophy on the nature of man, squares off face to face with the many branches of scientific engineering that arise from the study of oceanography. It has burdened itself with the mission of setting out to produce talented men and women gualified in oceanographic science and technology, and to develop oceanographic sciences and technology.

After the liberation, the country attached great importance to the cause of teaching various areas of study in oceanography. In 1952, when the re-organization of all of the departments in institutes of higher learning occurred, a part of the teachers at Jiang Xia Men University, those who were engaged in the task of teaching oceanographic sciences, entered Shan Dong University and established the Oceanographic Sciences Department. In 1953, when Shan Dong University moved from Qing Dao back to Ji Nan, the remaining teachers of the oceanographic department, aquatic production department, and physics, chemistry, and biology departments became a foundation for the establishment of the Shan Dong Oceanographic Institute in 1959.

During the initial stages of establishment, the entire school had only two departments with five specialties. There were 258 staff members and workers, 481 students, a library with little over 90,000 books, 360 different types of periodicals, and a comparatively small amount of instruments and equipment. Because of the country's heavy emphasis and support, the institute was incessantly developing and growing. In the early sixties, it built (TN: or had built) our country's first 2,500 ton operational oceanographic fact finding vessel, named ((the East is Red)). This created another new specialty, the compilation of suitable teaching materials for the various character-Istics of our nation's oceans. The quality of education was continually raised.

494

In 1962, after the elimination of the Shah Dong Geological lostitute, a portion of the teaching staff and equipment entered the Shan Dong Oceanographic Institute's Oceanographic Geology Department, causing that school's teaching strength to be replinished and enriched, advancing a further step, on a larger scale, the growth of that school.

Until 1983, that school's student population had grown to 1,858 people, having 30 foreign exchange students, and enrolling a number of research students.

In 1965, the Shan Dong Oceanographic Institute became administratively attached to the National Eureau of Oceanography.

During the Decade of Turmoil, the Shan Dong Oceanographic Institute's output capacity was destroyed, and it stopped student enrollment for more than five years. The Aquatic Production Department's teaching staff, instruments, and staff were in comparatively good condition, so they were sent to be a part of the Yan Tai Aquatics Production School (a middle level specialty school).

In 1978, the Shan Dong Oceanographic Institute was returned to the administrative control of the Ministry of Education, and the Aquatics Production Department moved back to Qing Dao from Yan Tai. It also returned to the administrative control of the Ministry of Education. Currently, the institute has developed and grown to have eight departments with 13 specialties. The programs of tudy are set up on a four year system.



The Shan Dong Oceanographic Institute's operational fact finding vessel, "the East is Red".

DEPARTMENT OF OCEANOGRAPHIC PHYSICS Oceanographic Physics Specialty Oceanographic Climatology Specialty

DEPARTMENT OF MARINE PHYSICS Marine Physics Specialty

DEPARTMENT OF MARINE CHEMISTRY Oceanographic Chemistry Specialty

DEPARTMENT OF MARINE BIOLOGY Marine Biology Specialty Marine Botany Specialty

DEPARTMENT OF OCEANOGRAPHIC GEOLOGY Oceanographic Geology Specialty Marine Geological and Global Physics Specialty

DEPARTMENT OF AQUATIC PRODUCTION Marine Plant Cultivation Specialty Marine Products Processing Specialty Marine Dredging and Seining Specialty

DEPARTMENT OF MARINE CONSTRUCTION Marine Construction Machinery Specialty

DEPARTMENT OF MATHEMATICS Mathematics Specialty

Additionally, there is a public curriculum (TN: ie. core courses) set up for each specialty within the entire school. In 1980, the institute had a total of 1,643 students, 20 research students, and eleven advanced students.

Shan Dong Oceanographic Institute currently has 50 different types of experimental laboratories. Among them are the Mai Dao Seashore laboratory, the Tai Ping Jiao ocean water botanical cultivation

fields, the meteriological reporting station, the oceanic motive force laboratory, as well as other comparatively large laboratories.

Along with the Shan Dong Oceanographic Institute's mission of teaching for the whole school, it has also succeeded in the development of scientific research work. In basic theoretical research, investigation of the ocean's environment, ocean resources exploitation and utilization, development of oceanic research instruments, and other areas, the school has achieved many scientific successes. Among these successes are Ocean Mave Theory and Calculation Methods, Development and Formation of Cold Water Masses in the Yellow Sea, kelp field motion and circulation, storm and tidal formation warning instruments, fixed distribution theory of trace elements in liquids, and other articles of research, all of which have reached a relatively high standard of scientific technology. The ship's on board laboratory has an electronic saline meter, an AD-1 model polarograph, temperate saline automatic depth recording instruments for use when the ship is underway. ocean current direct-read devices, depth meters, gradient meters, under-water light dispersion devices, lasers, and televisions, etc. Great achievements have been made in regards to our nation's oceanic scientific and technological investigative equipment development. Some of them have already become a standard for many types of foreign products. The Oceanic Notive Force Experimental Laboratory in recent years has undertaken approximately 30 predefined experimental research projects, both in and out of country, in ports, docks, bays, and wharfs. It has attained success in much of its scientific research, and has gained the commendation of the relevant departments.

The Institute has set up an Oceanographic Research Center with eleven research sections under its control. These are the Computer Section, the Marine Construction Research Section, the Marine Motive Force Simulation Research Section, the Marine Motive Force Research Studies Section, the Marine and Atmospheric Mutual Research Section, the Marine Remote Sensors Research Section, the Coeanographic Chemistry Research Section, the Marine Biological Research Section, the Coastal and Mainland Research Section, the Marine Aquatics Production Research Section, and the Oceanographic Investigative Research Section. The Shan Dong Oceanographic Institute currently bus 1,000 second members and workers; among them are 533 teachers and 60 ministrati teachers. Among the teachers, there are 10 professors and 50 monittant professors. There are 303 lecturers, 19 teacher's aides, and 135 tutors. Among these troops (TN: lit.) are some of our nation's well known Oceanographic Sciences scholars. For example, Professor He Chong Ben (assistant Institute Administrator and, concurrently, Section Chief for the Oceanographic Research Section), Professor Tan-Shi Xi (an assistant academics administrator and, concurrently, the Assistant Section Chief of the Oceanographic Research Section), and Professor Wen Sheng Chang (an assistant academics administrator and, concurrently, an assistant section chief of the Oceanographic Peceano-Section), etc. Among the younger teachers, many have further advanced the cause of developing oceanographic sciences education, and, in this respect, have met with success.

In recent years, Shan Dong Oceanographic Institute has invited scholars from abroad to come to the school and lecture, or to lead or participate in scientific work, and, at the same time, has selected teachers to be sent abroad to study, examine, or conduct research work, or to participate in scientific and technological meetings or tour. Moreover, in over 70 foreign universities a contact point has been established by the science and research unit to exchange science and technology information. This further advances the associations and friendships of our scholars with foreigners, to the benefit of our nation. It has increased the standards of quality for teaching, promoting the development of teaching and research work.

At present, this school has established a Science and Technology Committee. It is responsible for drawing up plans for the development of education for the school, scientific research work and evaluation of major questions and proposals presented by research students, review and evaluation of research accomplishments, and the critique of research students graduation thesises and projects, to preside over scientific and technological debates within the school, and to or oneize, and participate in, both in and out of country, science and technonological exchange activities, etc.

The school regularly compiles and publishes the ((Shan Song Coenographic Institute School Paper)), already being distributed both nationwide and abroad. In addition to this, on an infrequent basis, the school compiles and translates such periodicals as ((Seaweed Industrial Materials)), ((Ocean Waters (TW: ref. pinyin Ti Dian- unk. char, poss. misprint or context=iodine extraction) Selected Translations)), and ((Selected Translations in Oceanographic Geology)).

The Shan Dong Oceanographic Institute library currently has a collection of 460,000 books. Among these are 330,000 Chinese books and 80,000 foreign books. Additionally, there are over 2,100 different types of periodicals, and among these, 1,200 are current.

Shan Bong Oceanographic Institute is affiliated with a Marine Instruments factory, a printing house, a repair yard, an ocean standards factory (TN:ref. weights and measures), a fresh water cultivation experimentation farm, an ocean creature restraint yard, and an ocean creature specimen station; there is also affiliation with a kindergarten, a health care center, and various other human services organizations.

The institute stands on over 500 mu, and currently has constructed facilities that occupy an area of over 80,000 square meters.

Since the institution's establishment, Shan Dong Oceanographic Institute has produced a total of 4,215 graduates to further the cause with their contributions to the development of our nation's oceans and aquatic production.

The Shan Dong Oceanographic Institute is currently under the administrative jurisdiction of the Einistry of Education.

Commencement date: March 30

#### DONG PROVINCE

Hua Dong Petroleum Institute

Campus Address: Dong Ying, Shan Dong Province

The precursor to the Hua Dong Petroleum Institute was the Beijing Petroleum Institute; it was our country's first institute of higher learning for petrol sciences after the liberation.

In September of 1953, the Beijing Petroleum Institute and the Department of Petroleum Sciences from Qing Hua University formed the foundation for its establishment. At that time, it was under the profound dual leadership of the Centralized Fuels Industry Department and the Beijing municipality. At the time of its establishment, the school had only three departments: Petroleum Drilling, Petroleum Machinery and Petroleum Training Systems, as well as the relevant basic education classes (later, a basic curriculum section was established). The school was organized to have seven specialties. These were Petroleum Drilling, Petroleum Extraction, Petroleum Industries, Man-made Petroleum, Mining Machinery, Refineries Machinery, and petroleum reserves usage. There were 212 teachers. Following along with the development of the petroleum industry, the school continually developed and expanded, establishing in succession the specialties of Geological Petroleum Prospecting, World Petroleum Prospecting Physics, World Mining and Excavation Physics, Petroleum Industries, Economics, and Management. In 1960, it again established more specialties. These were synthesization, automated production, instrument automation, and mathematics as well as chemistry, physics, mechanics, and other academic specialties. The student population at the school increased to 5,553 people. Through a very short twelve year developmental period, until the eve of the Decade of Turmoil, the number of teachers in the school expanded to 713. The area occupied by buildings was in excess of 160,000 square meters. The school was arranged with 14 specialties, 80 experimental laboratories, three research centers, and a library with a book collection approachin. 300,000 volumes. The school also had, on a proportional scale, a

fairly complete collection of equipment. There were over 5,000 students in the 5-year program at the industrial institute for higher learning. The school had become, at that time, the best school of higher learning in our country.

STATES AND AND THE PARTY PARTY PARTY

Before the Decade of Turmoil, and for a period following, Beijing Petroleum Institute had been increasing the number of foreign exchange students it would accept. There were 49 foreign exchange students in the school who were engaged in studies, and 16 foreign specialists who had assumed positions as teachers.

From 1966 to 1976, the Beijing Petroleum Institute was the recipient of great suffering and losses, and was destroyed during this time. It ceased student enrollment for a five year period. In November of 1969, the school retreated to the oil fields freed by the East Battalion in San Dong Province. The name was changed to Hua Dong Petroleum Institute. It became a part of the leadership system controlled by Shan Dong Province and the Ministry of Petroleum Industry. It then reverted back to the leadership of Shan Dong Province.

Beginning in 1971, because the school had suffered major difficulties, students were enrolled in programs of three years length.

After crushing the "Gang of Four", especially since the November 3rd session of the National Committees, Hua Dong Petroleum Institute has endeavored to become a school skilled in its own management. It built new school facilities, remodeled the simple structures, built a new library, experimental testing building, instructional building, and several student, teacher, and staff dormitories. The new school buildings occupied an area (this includes the previously built permanent structures, projects under final construction, and the newer, simple buildings that were built) in excess of 70,000 square meters. At present, the school structures are still being built at an increasing rate. The school currently occupies 1,164 mu.

Presently, the school has established 6 departments with twelve specialties and one basic Academics Research Section.

DEPARTMENT OF PETROLEUM MINING Geological Petroleum Prospecting Specialty Global Petroleum Prospecting Physics Specialty DEPARTMENT OF PETROLEUM EXPLOITATION Petroleum Drilling Specialty Extraction Engineering Specialty

DEPARTMENT OF PETROLEUM REFINING Refining Engineering Specialty Basic Organic Chemistry Specialty

DEPARTMENT OF PETROLEUM MACHINERY Petroleum Mining Machinery Specialty Industrial Refineries Machinery Specialty

DEPARTMENT OF AUTOMATION Petroleum Reserves Usage Specialty Petroleum Production and Processing Automation Specialty

DEPARTMENT OF PETROLEUM INDUSTRY MANAGEMENT Petroleum Industry Management Engineering Specialty

Each specialty's undergraduate program is limited to four years. The research student program was restored in 1978. In 1980, the school had 3,281 students enrolled. There were 25 research students in school. Hua Dong Petroleum Institute has an innate property or quality that is relatively good. Middle-aged teachers have a great deal of academic expertise. The administrator of the Institute, Professor Chang Guang Hua has, from Beijing University, and from Qing Hua University, held teaching positions. He has attained a profound knowledge in such subjects as thermal dynamics, chemical engineering, and petroleum refining industrial arts, etc. Assistant Institute Administrator, Professor Mo Ye Jie, was the assistant coordinator for the Chinese Atomic Research Committee. His specialty is in stable or solid fuels processing, petroleum chemical and industrial arts and research, etc. Many practical uses for coal have been found for our country, such as the development of synthetic fuels technology that earned several citations. Mechanics Professor Cha Qiang Qin's research work in Vibration Theory has created many new ideas. Mine

1.1.1.1.1.1.1.1.1

shaft surveying specialist Professor Wang Er Cai has conducted a great deal of research and generated many articles on the subject of mine shaft surveying. He has achieved a great deal of success in his work. Since 1979, the Institute has sent 22 successive assistant professors and lecturers abroad to investigate and study, and 15 people have been sent for advanced studies. Presently, the institute has a staff of 2,646 people, and among them are 755 teachers. Among the teachers are 9 professors and 120 assistant professors. There are 2 assistant researchers and 435 lecturers. There are 38 teaching specialists and 151 assistant teachers. There are 73 engineering instructors and 59 engineering assistants.

The institute emphasizes development of the whole person, morals, wisdom, and the body. In addition to the basic academic studies, there is active participation in extra-curricular activities at the school. In 1979, the institute was judged to be one of the country's finest physical fitness education units.

The Hua Dong Petroleum Institute has emphasized the development of academic research work from the time before the Decade of Turmoil. Even at that time, the school had built and established a petroleum exploitation research section, a petroleum machinery research section, and a petroleum processing research section. Since 1979, with the prior approval of the Ministry of Petroleum, plans have been drawn up for the building of 6 research sections: coal, rock salt, and mud petroleum extraction, petro-chemical engineering, petroleum drilling and a petroleum machinery research section. The school is moving toward the establishment of an integrated research unit of teachers and staff workers, and has received many significant achievements in many areas of research work.

Since the Institute's establishment, 29 successful research articles have attained advanced levels of achievement, and two have achieved international success. In 1960, at the time of the decisive engagement in the Da Qing oil fields, the school collaborated with the oil fields and received an award for the experimental research work done on a water cooled variable heat furnace. In 1963, the Institute accomplished a great feat by researching and simultaneously pumping in seven petroleum fields. For their discoveries and achievement three commendations were received from the National Science Committee. At the National Science Committee meeting in 1978, the Institute had nine articles that received commendation from the National Science Committee. At the Shan Dong Province Science Committee meeting, the Institute won 14 awards.

Currently, the Hua Dong Petroleum Institute has 26 experimental laboratories. Since this year, it has been replenished and enriched with a variety of instruments and equipment, for example, the SN-388 HR digital earthquake measurement instrument, a PDP 11/45 electronic computer, CADT comprehensive recording mining apparatus, and many types of spectographs, instruments, and equipment that reach a total of more than 1,300,000 yuan in value. The school's electronic teaching equipment has also increased year by year. Presently, it is equipped with color video recording equipment, video projectors, and televisions; there are movie stills and more than 30 movies of an instructional nature. Also established was a language research center and a foreign language listening laboratory.

The school library presently has in excess of 500,000 volumes in its collection, and over 740 different subscriptions to Chinese periodicals. There are 720 types of foreign periodicals available.

The school compiles two periodicals for publication, the (Hua Dong Petroleum Institute School Paper) and the (Foreign Petroleum Science and Technology Resources Journal). The editors first publicly distribute the periodicals, then, and more importantly, after it has been distributed throughout the country, communicate with others (TN: academians) about its contents.

The school manages a refinery, a machine factory, an instruments factory, and shoulders responsibility for the hands-on training and teaching duties of the students who work in the factories for quality control.

The school also is affiliated with a middle school, an elementary school, and a cooperative farm (with 600 mu of rice paddies).

The Hua Dong Petroleum Institute (including the Beijing Petroleum Institute) has, since its establishment 27 years ago, produced over 14,688 under-graduate students and 164 research students for our country, each of whom can make their contributions to the development of our petroleum industry.

The Hua Dong Petroleum Institute is presently under the administrative control of the Ministry of Petroleum Industries.

With its development established in physics, industry, and management integration, and with the major emphasis on industry with primary importance attached to elevation of its standards, the specialties are listed as characteristic of this institute.

> Commencement Date: October 1 Institute Administrator: Cheng Guang Hua Party Secretary: Chao Yan



HE NAN PROVINCE

Zheng Zhou University

Campus Address:

University Road Zheng Zhou City He Nan Province

Zheng Zhou University was established on September 15, 1956 in the western part of Zheng Zhou on the bank of the Jin Shui River. In the early stages of its establishment, it had organized only 3 departments with 3 specialties; those were mathematics, physics, and chemistry. The programs were organized on a 4 year system. The school was under the administrative control of the Ministry of Education. The important teachers and staff came from Shan Dong University, The People's University of Bei Jing, Bei Jing University, Fu Dan University, Wu Han University, and Si Zhou University. The famous philosophy and history scholar Ji Wen Bu was the first person to accept the post as University Administrator for Zheng Zhou University.

The administrative management of the school became the responsibility of He Nan Province in 1958. The school increased the number of departments by adding a Government History Department and a Chinese Language Department. In 1959, the number of departments was again increased by the addition of 4 more departments: Water Conservation Department, Machinery Department, Earth Construction Department, and Electric Motors and Generators Department. The school became one of academics, literature, and industry with an integrative spirit. In 1961, at the time of the departmental reorganizations, the Zheng Zhou Teacher's College was incorporated as a part of the Zheng Zhou University. In December of 1963, the Water Conservation, Machinery, Earth Construction, and Electric Motors and Generators Departments, and the 4 departments of the School of Engineering, established the He Nan School of Engineering (later, the name was changed to the Zheng Zhou Engineering Institute). The Geography Department was realigned to support the Teacher's College. After the

reorganization, Zheng Zhou University became an integrative school of literature, science, and the arts, establishing 7 departments. These were the departments of mathematics, physics, chemistry, foreign languages, Chinese, government, and history. There were 8 specialties offered. Additionally, a Marxism research study center and a physical education research center were built. There were 1,756 students in attendance, and 900 staff members. Among the staff members, over 400 were teachers.

During the Decade of Turmoil, student enrollment stopped for a 6-year period.

After the "Gang of Four" was crushed, the school went through a period of restoration and reorganization. In 1979, a Philosophy Department and an Economics Department were added. In 1980, a Law Department was also added. Currently, the school has 10 departments and 14 specialties. The programs are arranged on a four-year system. In 1978, the enrollment of research students was resumed in a twoyear program and a three-year program.

> DEPARTMENT OF CHINESE LANGUAGE AND LITERATURE Chinese Language and Literature Specialty

DEPARTMENT OF FOREIGN LANGUAGES Foreign Language Specialty

DEPARTMENT OF HISTORY History Specialty Archaeology Specialty

DEPARTMENT OF PHILOSOPHY Philosophy Specialty

DEPARTMENT OF GOVERNMENT

Government Specialty

DEPARTMENT OF ECONOMICS Government Economic Specialty

DEPARTMENT OF LAW Law Specialty

DEPARTMENT OF MATHEMATICS Computer Science and Technology Specialty Mathematics Specialty

DEPARTMENT OF PHYSICS Physics Specialty Wireless Radio Specialty Electronic Radio Specialty

DEPARTMENT OF CHEMISTRY Chemistry Specialty

In 1980, there were 3,265 undergraduate students, 47 research students, and 182 advanced studies students in attendance. There were 1,522 staff members and workers, and among these were 616 teachers. Among the teachers were 8 professors, one American invited as an honorary professor, 33 assistant professors, 343 lecturers, 93 teachers' aides, and 138 assistant teachers.

In aspects of scientific research, 12 research centers have been built. Among the science departments have been established the High Energy Physics Research Center, Physics Theory Research Center, Civil Engineering Plastics Research Center, and a Catalytic Chemistry Research Center. The arts department has established a Population Theory Research Center, a Language Research Center, an Ancient Literature Research Center, a Literary Theory Research Center, the Indian/Chinese History Research Center, the research center for the history of local revolutions and struggles, an ancient Chinese economics research center, and an archaeological research center. Each research center is divided into a part of, and responsible for, the National Science Committee, the He Nan Province, and the Department of Foreign Relations Committee's research mission. For example, modern Chinese language professor Zhang Zheng, entrusts to the Education Department Committee the task of compiling for publication the ((Modern Chinese)) text that gives our nation's institutes of higher learning a united curricula. It has already been published and distributed.

The ((Zheng Zhou University School Paper)) is compiled and published on a regular basis.

The library has a collection of over 1,000,000 books. Among them are 160,000 foreign books and periodicals.

Currently, there are 36 experimentation laboratories for the whole school. These experimentation laboratories are supplied with Mu Shi Bao Er spectographs, atomic absorption spectra luminators, nuclear magnetic resonance spectographs, x-ray diffraction grating spectographs, diffraction grating spectographs, electronic computers, etc. Besides these, there are closed circuit color televisions and black and white closed circuit televisions of various types, as well as telephonic instructional rooms reserved for special use in public instruction.

This school has established a printing house, a chemical industrial plant, a metals factory, and bears responsibility for the mission of teaching and scientific research work.

In order to oversee the well being of the staff, teachers, and students, the school also has a farm, a hospital, an elementary school, and a child care center.

The school occupies more than 800 mu of land. The facilities constructed on school premises occupies an area of over 148,000 square meters.

This school actively encourages teachers and students to conduct scientific and technological research. From 1978 to 1980 the school has attained 33 national and provincial scientific awards. The Chemistry Department's successful research project "Technoloogical

509.

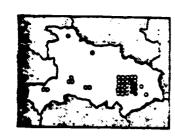
Fabrication of Spherical Catalysts in Ammonium Synthesis" received 3 National Science Committee Discovery Awards. The research success in "Petroleum Fermentated Nylon Materials" is blazing the way for our national plastics industry to follow a new path. The History Department's jointly written and already published ((Early Origins and Chronological History of the Dao Culture)) that has sold both at home and abroad, is causing historians to attach great importance to it. In 1979, the Mathematics Department issued the ((Graduated Calculations Traced Out for Differential Calculus)) that has a great value in academic circles, for solving mathematics problems that, for a long time, had been unsolvable by mathematicians. Great emphasis was given to the essay by mathematicians both at home and abroad.

Since this year, Zheng Zhou University has invited brilliant scientific scholars from abroad and within the country to come and teach classes, lecture, and lead or participate in scientific research. On another aspect, brilliant teachers, students, and management personnel have been sent to America, Australia, and various other countries' schools of higher learning and research organizations to study, investigate, and conduct scientific research work, or to participate in scientific and technological committee meetings. Aside from these activities, it also increases the associations of this school, and the friendship with foreign schools. This promotes the development of both the school and scientific research work.

Since the school's establishment, Zheng Zhou University has produced 8,800 men and women with advanced specialties who are engaged in the front lines of scientific research work and development for our country.

Current School Administrator: Fan Dao Yun Party Secretary: Wang Bei Yu (acting)

Hu Bei Province



Wu Han University

Campus Address: Wu Jing Iuo Jia Mtn, Wu Han City, Hu Bei Province

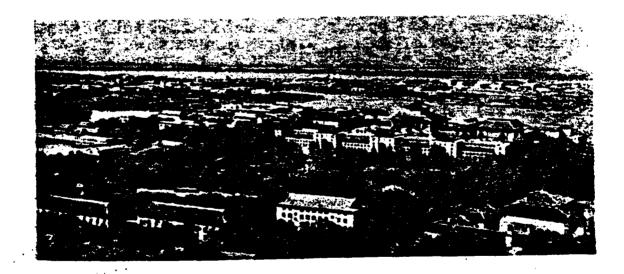
Wu Han University was founded in 1913. It was named the Wu Jing Teacher's College. In 1923, the name was changed to the nationally established Wu Jing Teacher's University. In 1924, the name was changed to Wu Jing University. In 1925, the name was changed to the Wu Jing Zhong Shan University. The school's original location was at Dong Chang Harbor in Wu Jing City. In October of 1928, the school's name was changed permanently to Wu Han University. In 1932, the school moved from Dong Chang Harbor to Wu Jing Luo Jia Mountain.

During the initial establishment of the school, it had only four departments; they were Chinese Literature and History, English, Mathematics Theory, and Natural Geography. In 1923, this changed, and there were eight departments. They were Chinese Language, English Language, Socialist History, Educational Philosophy, Mathematics, Physics, Chemistry, Biology, and Geography. In 1928, after the name had been changed to Wu Han University, there were three schools established within the university system. These were the School of Literature, the School of Social Sciences, and the School of Physics and Engineering. There were ten specialties established: Chinese Literature, Foreign Literature, Philosophy, Law, Government Economics, Commerce, Mathematics, Physics, Chemistry, and Biology. In 1929, the School of Social Sciences became a Legalists School, the Government Economics Department split and became the Government Department and the Economics Department, and the Physics and Engineering School split and became the School of Physics and the School of Engineering. After the School of Engineering was established, it organized a Department of Civil Engineering. In 1930, the School of Literature grew by the addition of a History Department. The Philosophy Department became the Department of Philosophy and Education. In 1932, the Commerce Department merged with the Economics Department. In 1933, the School of Engineering grew by the addition of a Mechanical Engineering Department. In 1935, it also established

an Electrical Engineering Department. In 1936, an Agricultural School was established, and it set up and organized a Farming Department. After the start of the War of Resistance Against Japan in February of 1938, Wu Han University moved to Dong Shan in Si Zhou. Here, the entire school system was reorganized. A Mining and Metallurgy Department was added. The Farming Department merged with Central (TN: Zhong Yang) University. After victory in the War of Resistance Against Japan, in June of 1946, Wu Han University moved back to Iuo Jia Mountain. In the same year, the Agricultural School was restored, and it added a Forestry Department to it. In the next year, a Medical School was also established. Just before Wu Han was liberated in 1949, the whole university had six schools: the School of Literature, the School of Law, the School of Physics, the School of Engineering, the School of Agriculture, and the School of Medicine. There were 19 departments. These were the Departments of Chinese Literature, Foreign Language Studies, History, Philosophy, Government, Economics, Law, Mathematics, Physics, Chemistry, Biology, Civil Engineering, Mechanical Engineering, Electrical Engineering, Mining and Metallurgy, Agricultural Arts, Forestry, Horticulture, and Animal Husbandry. The Scientific Research Organization, through the originally established Legalists Research Section, the Economics Studies Branch, and the Engineering Research Section's Civil Engineering Study Branch, developed to have eight research sections in areas of Chinese Literature, History, Government, Economics, Physics, Chemistry, Civil Engineering, and Electrical Engineering. There were 1,750 students attending school and 297 teachers (among them were 134 professors and 32 assistant professors, 50 lecturers, and 81 assistant teachers). There were 318 staff workers.

Before the liberation, Wu Han University placed a great deal of emphasis on education in basic theories. In the development of the curriculum, the first year of studies emphasized the common or core studies; in the second and third year, the emphasis was placed on the required courses; in the fourth year, the emphasis was placed on applications and theory. The curriculum stressed heavily the systemization and continuity of subject matter in the courses. Furthermore, heavy emphasis was placed on the teachers and lecturers being equipped with whatever they required. The major curricula was the responsibility of the professors.

In aspects of scientific research, great emphasis was placed on international cooperation and exchange of academic knowledge. A mutual transfer of teachers would take place between the academic knowledge units and the concerned nations. Scholars participated in activities to exchange academic knowledge. Additionally, a mutual transfer of exchange students or research students would take place so that scientific and technological research work could be conducted. In order to promote the development of academic knowledge activities, the school also established the ((Arts Department Quarterly)), the ((Social Sciences Quarterly)), the ((Science Department Quarterly)), the ((Engineering Department's Annual)), and also publishes the Wu Han University Book Collection.



An angle of the Wu Han University Campus Grounds

Due to the great emphasis placed on the teaching of basic theory, it led to further developments in academic research, and the quality of teaching was raised. Not only were a group of suitable graduates produced for the nation, but also in international academic circles, many important research successes were obtained in areas of law,economics, Chinese language and literature, studies of viruses, random number theory, and the ionosphere.

Wu Han University has had a long and glorious revolutionary tradition. During the period of the first uprising in the internal struggle of resistance, Zhong Bi Wu, Cao Rong Qiu, and others were engaged in revolutionary activities. The school was stereotyped as the Wu Han Region's "cradle of resistance". The five greats of the Party convened their secret meetings here. After the eruption of the War of Resistance Against Japan, the school established the "Research Committee on the Resistance War Problems". Zhou En Lai and Zhong Bi Wu were welcomed many times as they came to the school to lecture or propagate the assertions of the Chinese Communist Party's Resistance in the War Against Japan. Many teachers and students joined in at the front lines and supported the struggle in the War of Resistance in the War Against Japan. During the time of the struggle for liberation the Wu Han University teachers and students actively participated in the anti-hunger movement, the struggle of internal resistance, and the anti-persecution movement. On June 1st, 1947, the Nationalist Party opposition dispatched a large group of military police to quell the student movement. Three students were killed by shooting. This created the shocking national "June 1st" tragedy. The bloodstains were on those dispatched to suppress the movement - those who were ineffective in forcing the students to yield in their advance. Under the Party's leadership, they (TN: the students) supported the struggle, and finally, in May of 1949, all of Wu Han, except those three killed in the suppression, welcomed in the liberation of Wu Han.

After the liberation, Wu Han University came under the leadership of the Party and the People's Government. In order to suit the needs of socialism, an active revision in teaching was carried out. In 1950, a Water Conservation Engineering Department was established along with the Banking, Taxation, Civil and Mechanical Engineering,

Electrical Force, Mining, Water Conservation, Forestry, Tea Leaf (TN: production), Foodstuffs and grains (TN: production), and Agricultural Investigation. There were eleven specialized departments altogether. The Medical School stopped enrolling students. In 1952, the Water Conservation Engineering Department became the School of Water Conservation. It established three departments: the Department of Hydro-engineering and Construction, the Department of River port Engineering, and the Department of Agricultural Fields Water Conservation. The Department of Government merged with the Department of Law to become the Department of Government and Law; later it was changed to become the Department of Law.

In the same year, all of the institutes of higher learning throughout the country conducted a major reorganization. The Wu Han University Medical School and the Shang Hai Tong Ji Medical School merged. It was established as the Zhong Nan Tong Ji Medical Institute (later the name was changed to the Wu Han Medical School). The Agricultural School merged with the Hu Bei Agricultural Institute, and was established as the Hua Zhong Agricultural Institute. In the Engineering School, the Departments of Mechanical Engineering, Electric Motors and Generators, Civil Engineering, and Mining were dispersed and spread out in the Zhong Nan area to merge with related school's departments. This led to the establishment of the Hua Zhong Engineering Institute, the Chang Sha Institute of Civil Engineering and Construction, and the Zhong Nan Mining and Metallurgy School (the Chang Sha Institute's name was later changed to Chang Sha Railway Institute). The Water Conservation School (established in 1952) merged with the relevant departments in the Tian Jin region. establishing the Wu Han Water Conservation Institute (it was later changed to be the Wy Han Water Conservation and Electric Force Institute The Philosophy Department in the School of Literature merged with, and became a part of, Beijing University. The English section of the Foreign Languages Department merged with Zhong Shan University of Guang Zhou. At the same time, Zhong Shan University, Nan Jing Universit Guang Xi University, Qhong Hua University, and Hua Zhong University's various departments of science, as well as the Wu Jing University's Cultural Library Specialty School, each of them, in succession, merged with Wu Han University. In this system of organization, the school

system of the universities was abolished. The original three schools of literature, law, and science, with their Chinese, History, Economics, Law. Mathematics, Physics, Chemistry, and Biology Departments formed a foundation, along with the Foreign Language Department's becoming the Russian Literature Department and the addition of the Library Specialty Studies Department, for the formation of a university integrated with literature and science (TN: Arts and Sciences). Later, because of the requirements in the cause for development, another reorganization occurred. In 1956, the Department of Philosophy was restored. The Library Specialty Studies Department was changed to the Department of Library Sciences. In 1958, the Russian Language Department was changed to the Foreign Language Department. The Law Department merged with Hu Bei University. In the same year, a Branch for Industrial and Agricultural Prediction (TN: Trends) was established. In 1960, the Department of Government was restored, and an Atomic Energy Department was established (with the Physics and Chemistry Department). These Departments and Branches, from 1961 to 1963, were one after the other abolished. Until 1965, the whole school had 10 departments, 29 specialties and specialists sections, 8 research centers; there were 4,121 students enrolled in school, with 37 research students, 130 foreign exchange students, 803 teachers (among them were 43 professors, 36 assistant professors, 199 lecturers, 7 training personnel, and 518 assistant teachers), and a working staff of 1.002 personnel.

During the Decade of Turmoil, the school and its contents were destroyed. It stopped enrolling students for nearly four years. On a developmental scale, the quality of teaching and the academic level in the scyool was greatly influenced.

After crushing the "Gang of Four", under the leadership and guidance of the Party and the People's Government, after going through reorganization, readjustment, and the implementation of the Party's specific policies, Wu Han University again continued to advance.

Within several years, Wu Han University transformed into a school of dilligent studies, emphasizing the basics, with a strict, cautiously controlled style of study. Xu De Pan, Guan Chu Min, Huang Cu, Ceng Zhao Lun, Lan Ke Zhi, Ye Du Ji, Dou Da Fo, Cha Xiang Si, Ji Guo Yan, Cha Zhong Yu, Cha Jian, Wu Dong Luan, Tang Pei Si, and other specialiste have been teachers here. Wen Yi Duo was the appointed administrator to the School of Literature. The famous international law scholar, Zhou Yu Sheng, and the Marxist Philosophy scholar Li Da had both, at various times, held positions of responsibility as school administrator.

In aspects of teaching, a relatively good foundation was gradually formed, increasing the strengths of teaching, and giving the school some unique, characteristic specialties. Compiling and writing over 200 types of instructional materials increased the foundational theories and experimental curricula for teaching. In the past 31 years, the university has produced 24,705 graduates for the nation (among these are 194 research students). Compared to the 36 years prior to the liberation, the total number of graduates has increased threefold. The majority of these graduates are engaged in work with research units, as specialists or professionals at universities, in factories or mining industries, teaching, or other related work. Some have already established themselves as leaders in organizations, or as pillars of strength in technology units, achieving a great deal in the work of modernizing our socialist society.

In regards to academic research, altogether more than 2,260 different types of academic problems or questions have been researched. Works of the Literature Department include over 100 items, such as ((An Explanation of Literary Significance in the Carved Dragon)), ((Spoken Literature with Ancient Musical Score)), ((A Collection of Books of the Wei, Qin, Nan, Bei, and Chao Dynasties)), and several readers, such as ((The History of World Communications)) (first edition), ((Practical Theories) Explained)), (((Conflicting Theories) Explained)), ((A Draft of the History of Currency and Finance of the Qing Dynasty)), ((The Natural Conditions for the Establishment of our National Economic System)), ((The Post-War American Economic Crisis)). ((Research on the History of Marxism)), and ((The Classification Methods of the Library of Wu Han University)), etc. Among them, over 88% are written collectively by specialists, translators, and theorists. Several of the articles have achieved relatively high academic levels, receiving the welcome and emphasis of scholars both at home and abroad. The science departments have also received many awards for research work in areas such as virology, random number theory, mathematics,

physics, ionization, electromotive force engineering studies, light accumulation devices, biologic liquid crystal, how the red-eyed bee entrusts to a host the task of constructing a place for its eggs, superior rice cultivation, and other varied, excellent research work. Ninety articles have reached advanced levels (TN: technological) both at home and abroad. 54 articles received citations or awards at the 1978 National Science Committee's meeting, and at the Hu Bei Province Science Committee meeting.

The school regularly publishes the ((Wu Han University School Paper)), a natural science publication (quarterly), and a philosophy and social sciences publication (bi-monthly).

In the past two years, on one hand the school has invited scholars from within the country and abroad to come to the university and lecture, lead academic research work, etc., and on the other hand has sent outstanding teachers to foreign nations to study, investigate, or participate in academic and technological committees. Moreover, for those receiving foreign educations, the academics section have established an academic and technological cooperative and an academic technological communications system. This further promotes the school's work in teaching and academics.

Currently, the school has organized 15 departments with 35 specialties. Study is on a four year system. Research students are on a three-year program.

> DEPARTMENT OF CHINESE LANGUAGE AND LITERATURE Chinese Literature Specialty DEPARTMENT OF FOREIGN LANGUAGES English Language Specialty Japanese Language Specialty German Language Specialty

Russian Language Specialty

### DEPARTMENT OF FRENCH LANGUAGE AND LITERATURE

French Language Specialty

Scientific and Technological French Specialty

# DEPARTMENT OF HISTORY

History Specialty Archaeology Specialty

#### DEPARTMENT OF PHILOSOPHY

Dialectic Materialism Specialty History of Materialism Specialty Philosophy Specialty

#### DEPARTMENT OF ECONOMICS

Government Economics Specialty Economics Management Specialty World Economics Specialty History of Economics Specialty

DEPARTMENT OF LAW Law Specialty

#### DEPARTMENT OF LIBRARY SCIENCES

Library Sciences Specialty Scientific and Technological Reporting Specialty

## DEPARTMENT OF MATHEMATICS

Mathematics Specialty Computer Mathematics Specialty Applied Mathematics Specialty DEPARTMENT OF COMPUTER SCIENCES Computer Systems and Structure Specialty Computer Software Specialty

DEPARTMENT OF PHYSICS Physics Specialty

DEPARTMENT OF AERONAUTICAL PHYSICS Atmospheric Electric Wave Propagation Specialty Radio Electronics Specialty Aeronautical Physics Specialty

DEPARTMENT OF CHEMISTRY Chemistry Specialty

DEPARTMENT OF BIOLOGY Cellular Biology Specialty Genetics Specialty Microbiology Specialty Biochemistry Specialty

DEPARTMENT OF VIROLOGY Virological Sciences Specialty

The general courses of study in the school are split in different systems. Besides the required common core courses in government theory, foreign language, and physical education, there are over 180 different required courses for the specialties, and over 400 elective courses to choose from.

In 1980, there were 4,385 undergraduate students in the school; there were 294 research students.

Currently, the school has 3,723 teachers and staff members. Among this number, there are 1,625 teachers. Among the teachers, there are 72 professors, 163 assistant professors, 731 lecturers, 84 teacher's aides, and 575 assistant teachers. Additionally, there

520

are 28 invited foreign specialists. History Department Professors Gan Zhuan Ping and Huang Zhuo, the Philosophy Department's Professor Li Da, the Economics Department Professor Zhi Ji Xian, the Law Department's Professor Shu De Be, the Aeronautics Department's Professors Gui Zhi Qin and Shen Po Xian, the Virology Department Professor Gao Xiang Yue, the Mathematics Department's Professor Li Guo Ping, Professor Cha Quan Xing of the Chemistry Department, and the Biology Department's Professor Sun Yang Zhong have all achieved comparatively good successes in their respective fields, receiving national and international emphasis for their work. Besides the many elder professors, there are also a great number behind them who are blossoming forth.

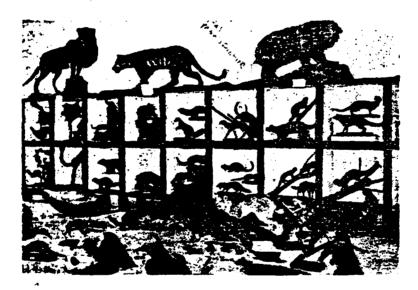
Presently, the school has 12 research centers; the Arts Department's six research centers are: Third through Ninth Century China Research Center, American and Canadian Economics Research Center, the International Law Research Center, the World History Research Center, and the Natural Dialecticism Research Center. The Sciences Department's six Research Centers are: the Mathematics Research Center, the Computer Sciences Research Center, the Virology Research Center, the Reproductive Biochemistry Research Center, the Atmospheric Electric Wave Propagation and Aeronautical Physics Research Center, and the Solid Physics Research Center. The Sciences Departments also have 8 independent research sections. Altogether, there are over 600 research worker and specialists.

Currently, the school has 91 experimental laboratories, a computer center, and an analysis and measurements center, over 10,000 instruments of various kinds for general use, over 200,000 biological and botanical specimens and models, a complete set of color video recording equipment, and a film exhibition installation, as well as specially used electronic classrooms for public teaching and scientific technological research and development activities.

The school library now has over 1,500,000 books and publications. Among them are 1,050,000 Chinese books and 460,000 foreign publications. Additionally, a foreign teaching materials center is established in the Wu Han University Library, and a current collection of over 5,800 types of instructional publications; they are printed in Japanese, German, French, etc., on subjects that include mathematics,

Physics, chemistry, biology, astronomy, construction, communications, transportation, and various other categories.

The school has control of a machine factory, a printing house, a chemical industries plant, a specialized machinists plant, an electronics factory, and a biochemistry and microbiology (TN: products) plant. The machine factory and the printing house are important for aiding in instructional (TN: production) materials and research. The former is responsible for the production of SSM-5B multi-use millisecond recorders and the QDzJ-2 type gravity acceleration measurement test recorders. The specialized machinists plant, the electronics factory, and the biochemistry and microbiology (TN: products) plant are important in that they are responsible for the manufacture of test products for the student's teaching practicums and research activities of the relevant departments.



213

A corner of the Wu Han University's Biology Department's Specimen Room.

The entire school at present occupies an area of 2,973 mu. Constructed facilities occupy an area of over 250,000 square meters.

**T** = 2 1 A 2 202 . . . . . .

A swimming recreation area of Wu Han University's East Lake.

At the present time, the entire school's teachers, students, staff, and workers are under the leadership of the Party and the People's Government, endeavoring to persevere in the continuing struggle to achieve success in the "Four Modernizations" that have been established (TN: the Four Modernizations is a plan directed by the Chinese Communist Party).

Current School Administrator: Chuang Guo

## Hua Zhong Industrial Institute

Campus Address: Wu Jing Yu Jia Mtn, Wu Han City, Hu Bei Province

The Hua Zhong Industrial Institute is situated near the suburbs of WuyHan City, on the side of East Lake, and to the north are the foothills of the Yu Jia Mountain. The school grounds are covered with green trees, concealed from the city; the scenery is tranquil.

The Hua Zhong Industrial Institute was built in 1953 in order to suit the needs of our country's socialized economy and its immediate requirements for talented men and women educated in science and technology. It was built as a multi-science institute. At that time, based on the directives concerning the reorganization and centralization of our national institutes of higher learning, the original Wu Han University, Hu Nan University, Nan Jing University, and Guang Xi University, all four of these organization's Machinery Departments were assembled collectively, along with the electric motors and generators section and the electric force section, Hua Nan Industrial Institute's Machinery Department's Motive Force Section, Electric Motors and Generators Section, and Electric Force Section. As well as these schools' sections, their basic instructors and their equipment were used to create the foundation for this school.

On January 17th of 1953, the Central Committee of the People's Government established a preparations committee for the Hua Zhong Industrial Institute. On September 11th of the same year, the school construction engineers broke ground for the construction of the Institute at Wu Jing Yu Jia Mountain's southern foothills.

During the initial stages of construction of the Hua Zhong Industrial Institute, in order to make the best effort to produce the badly needed construction personnel for our country, the people were, on one hand, temporarily working construction, and, on the other hand, dispersed over the four regions of Wu Jing, Nan Jing, Chang Sha, and Gui Lin to attend classes. The opening ceremony for the institute took place in Wu Jing on October 15th, 1953. This day was established as

the Hua Zhong Industrial Institute's commencement date. Throughout the summer and fall of 1954, the Wu Jing, Gui Lin, Chang Sha, and Nan Jing sections continually moved to the new facilities on Yu Jia Mountain to attend classes. At the same time, the institute established four departments. These were the Machinery Manufacturing Department, the Automotive Internal Combustion Engine Department, the Electric Force Department, and the Motive Force Department. There were eight undergraduate specialties and four technician's course programs, such as Industrial Arts Machine Manufacture and Equipment, Foundry Industrial Arts and Equipment, Electrodes and Motors, Power Generator Plants, Electric Grid Network and Electric Force Systems, Thermal Energy Motive Force Installation, Water Powered Motive Force Installation, Automobile Design and Manufacture, Internal Combustion Engine Design and Manufacture, and other undergraduate specialties. The technician's programs included Metals Industry, Foundry Industry, Automotive Safeguards, Power Generator Plant Electric Grid Network and Force System, The undergraduate programs were four years in length, and the techetc. nicians programs were two years in length) (TN: the technicians programs were two years in length (TN: the technicians programs are equal to Assoc. Degree Programs).

In the summer of 1955, both the automobile design and manufacture and the internal combustion engine design and manufacture specialties were reorganized and moved to the Chang Qun Automobile and Tractor School, which is now the Gui Lin Industrial College. After going through reorganization and development, until 1959, the Hua Zhong Industrial Institute added 16 specialties, such as studies of metals and thermal control in automobile equipment, processing pressurized metals for engines, industrial enterprise in electrificatio wí less radio technology, automation studies and transportation studies, studies in industrial thermodynamic processing, water powered macuinery, metallurgical plant machinery equipment, chemical production engines and equipment, studies in inorganic chemical engineering, engineering physics, and vessel manufacture, etc. In September of 1960, the Metallurgical Chemical Engineering Department's three specialties of Metallurgical Plant Machinery Equipment, Chemical Production Engines and Equipment, and Inorganic Chemical Engineering Studies were separated from the school and reorganized into the Hu Bei Industrial Institute

and the Hu Bei Chemical Engineering Institute. Moreover, the Hua Zhong Industrial Institute added three departments: Wireless Radio Engineering, Automated Control, and Mechanics. From then until 1966, there were six departments and 19 specialties altogether. There were more than 1,100 teachers and 6,000 students. Since 1955, students entering the school have been in a five-year undergraduate program for their specialty studies.

In 1964, enrollment of research students began and, furthermore, several foreign exchange students were accepted for enrollment. During the time of the Decade of Turmoil. the school suffered severe losses. Student enrollment stopped for more than five years. Student enrollment was restored in 1971. Moreover, due to the destruction of the "Gang of Four", the work of teaching eventually returned to the path of normality. In the winter of the same year, the 1st Machine Industry Unit, attached to the original Wu Han Machine Institute, merged with the Hua Zhong Industrial Institute. After the merger, there were the following specialties: Machine Manufacturing Industrial Arts and Equipment, Foundry Industrial Arts and Equipment, Welding Industrial Arts and Equipment, Refrigerator Motors and Deep Freeze Installation, and Turbine and Compression Type Engines. After the "Gang of Four" was crushed, the Hua Zhong Industrial Institute speedily restored itself and further developed. Currently, there are 15 departments, 1 section, and 39 specialties. The program of study is 4 years. Additionally, there are two two-year technician programs.

DEPARTMENT OF MECHANICAL ENGINEERING I

Machine Manufacturing Industrial Arts Installation and Automation Hydraulic Pressure Rotary Motion Specialty

DEPARTMENT OF MECHANICAL ENGINEERING II Metal Materials Specialty Foundry Specialty Forging and Pressing of the Welding Specialty

DEPARTMENT OF SPECTRAL ENGINEERING

Infrared Technology Specialty Laser Specialty Optical Instruments Specialty

DEPARTMENT OF MOTIVE FORCE ENGINEERING

Power Plant Thermal Energy Motive Force Specialty Refrigeration and Low Temperature Technology Specialty Gaseous Motive Force Machinery Specialty Thermal Physics Engineering Specialty

## DEPARTMENT OF ELECTRICAL ENGINEERING

Electric Motors Specialty

Electrical Systems and Automation Specialty High Voltage Technology and Equipment Specialty

Hydro-electric Automation Specialty

Electromagnetic Measurement Technology Specialty

Water Powered Machinery Specialty

## DEPARTMENT OF SHIP ENGINEERING

Ship Engineering Specialty

Shipboard Internal Combustion Engine Specialty Ship and Shipyard Electrification and Auutomation Specialty

DEPARTMENT OF ECONOMIC MANAGEMENT ENGINEERING Resources Management Engineering Specialty

DEPARTMENT OF INFORMATION AND SCIENCE ENGINEERING Information Engineering Specialty Radio Technology Specialty Microwave Technology Specialty

527

DEPARTMENT OF SOLID STATE ELECTRONICS

Semiconductor Physics and Equipment Specialty

Dielectric Materials and Equipment Specialty

Electromagnetic Materials and Equipment Specialty

DEPARTMENT OF AUTOMATION CONTROL ENGINEERING

Systems Engineering Specialty Industrial Automotive Specialty Control Measurement Technology and Automated Instruments Specialty

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

Electronic Computer Specialty Computer Software Specialty Computer Peripheral Equipment Specialty

DEPARTMENT OF MATHEMATICS

Applied Mathematics Specialty

DEPARTMENT OF PHYSICS AND CHEMISTRY

Applied Physics Specialty (in prepatory construction) Applied Chemistry Specialty (in prepatory construction)

DEPARTMENT OF MECHANICS Biomechanics Specialty Solid Mechanics Specialty

DEPARTMENT OF FOREIGN LANGUAGES Technical English Specialty

## PHILOSOPHY AND SOCIAL SCIENCES SECTION

Until the fall of 1980, the number of undergraduate students in school had reached 6,122. There were 100 people in vocational classes and there were 310 research students. The whole school had 5,103 staff members and teachers. Among them were 2,247 teachers. Among the teachers were 67 professors, 324 assistant professors, 1,128 lecturers, 317 teacher's aides, and 411 assistant teachers.

In the work of teaching, the Hua Zhong Industrial Institute emphasized investigative research of modern technological developments and advanced international teaching experience. It emphasizes the teaching of basic physics theory and training in basic skills, as well as studies in foreign languages. There is emphasis on industrial enterprise, contact with various scientific research organizations, and the strengthening of friendly relations with our contacts. Many times people have been sent to be used in research units to conduct investigative research work, to understand the conditions of work for our graduates, to be used to revise the school's method of teaching, to do academic research work, or various other aspects of work that constantly improves the quality of teaching and raises the academic level of the school. In order to suit the needs of modern scientific technological development, and to produce graduates with scientific and technological ability as outlined in the Four Modernizations Plan, the Hua Zhong Industrial Institute incessantly emphasizes the newest findings in the professions. Since 1972, with the expanding technological developments and promotion of revisions in older specialties, there have been established specialties in laser, electronic computers, information engineering, microwave technology, biomechanics, and many other new technical fields.

In the past 20 years, Hua Zhong Industrial Institute has produced over 23,000 undergraduate and research student graduates for our country. Many among them have become the backbone of strength for the implementation of the Four Modernizations Plan established by our nation.

Hua Zhong Industrial Institute has heavily stressed the full exploitation of academic research work. In 1964, the dynamic balance device, the interpolarity device, and two other devices were the only four research projects sent to the international exposition in Leipzig. During the first five years of the Decade of Turmoil, the academic and scientific research projects of Hua Zhong Industrial Institute were very badly destroyed. After 1971, the school again started exploring academic research areas, and research projects grew in number and success year after year. After crushing the "Gang of Four",

scientific and academic research had many new developments. From 1971 to March of 1978, the school had completed work on 251 research projects assigned to them. Among these research projects, there were thirty that received citations or awards at the 1978 National Science Committee meeting. Hua Zhong Industrial Institute was named as one of the most advanced in our nation for the work of its research units. Professor Yu Xue Tian was listed as one of the most progressive workers in the unit. From 1978 to present, the school has completed many more academic and scientific research articles. Among these, there are 12 that have received National Creative Discovery Awards from the relevant committees. Three discoveries received the National Science Committee's approval and won three awards. They were hydraulic spiral pressure high efficiency rotary motion devices and hydraulic systems, experimentation and design methods with television porphyoid rays, and high frequency controllable silicon power source transducers.



Students of Hua Zhong Industrial Institute enjoying the tranquility, beginning a day in the intense but happy study activities.

In areas of academic and scientific research, the Hua Zhong Industrial Institute has restored the superiority of the sciences, organizing professional action groups for the related specialties and synthesizing the many academic problems to be researched. Since the start of the seventies, the Hua Zhong Industrial Institute has organized eight specialties and three foundational studies research sections.

The specialties are machine manufacture, electrification, and auto~ mation, automation and control, radio measurements, generators and motors, forging and pressing, and electrician's studies. There are around 200 teachers who are conducting research on machine automation; all told, they have completed 43 research projects, achieving comparatively good success in all of them. For example, in aspects of production lines, with the cooperation of other related research units. more than twenty tests of various production lines were conducted. Among those was the first automobile manufacturing plant prototype LQXA rod link heavy movement assembly line, which was sent to the international exposition in Nan Qi La Mo. In aspects of digital control milling machinery, the Hua Zhong Industrial Institute selfdesigned its own prototype automatic digital control milling machine and manufactured it. In 1977, it was sent to the exposition at Gui There it received the praise of visitors from both at home Zhou. and abroad. Continuing with their project, they built an even more sophisticated automatic digital control milling machine. The Hua Zhong Industrial Institute especially likes to stress the exploitation of the most modern research developments. For example, since 1972, the developmental research on the latest in laser technology has had admirable results. The synthesized research work in Imagery Analysis has also progressed admirably.

The Hua Zhong Industrial Institute also heavily emphasizes the research work done in basic physics theory. The assistant school administrator, famous in our country for his work in internal combustion engine fuels, Liu Xu, in the fifties was engaged in development research theory and application for diesel injection engines; he proposed the use of joint smelting theory to solve the problem of diesel engine combustion reactions. In the sixties, he supported a group in the successful prototype building of the first blower cooled diesel engine. The assistant school administrator and the Automation Research Section's Section Chief, Dong Chu, have in recent years led a research group in the theory and application of large systems. Many times they have gone abroad to investigate or participate

in international technological committees. The Resource Materials Study and Research Section's Section Chief, Professor Cui Can, has, for a long time, been engaged in research on precision steel instruments, and has had considerable success. Much of what he has researched has been approved by the country (TN: natl. approval auth.) already. During the National Graphics Engineering Committee meeting, Yu Xue Tian received awards for his long devotion and service, his achievements in Machine Graphics and Instrumentation, and for establishing a high speed method of machine graphics reading and assembly for workers.

Participation | second second



Students of Hua Zhong Industrial Institute being trained in basic experimentation techniques.

Hua Zhong Industrial Institute is actively engaged in the exploitation of many types of academic exchange activities. It often requests famous scholars from within the country and abroad to come to the institute and lecture, convene various types of technological committee meetings, and head various advanced studies groups, discussion groups, or research groups. Also, in many foreign universities is established a cooperative network for the mutual exchange of teachers, or the exchange of advanced technological teaching materials. The institution publishes, in addition to the ((Hua Zhong Industrial Institute School Paper)) the following publications: the Chinese Graphics Engineering Committee's ((Engineering Graphics School Paper)), and the Chinese Mechanics Studies Committee's ((Solid Mechanics School **Paper)).** Furthermore, they also publish the ((Hua Zhong Industrial Institute School Paper)) (published by the Philosophical Academics Committee, ((Studies of Natural Dialectic Methods)), and ((Advanced Educational Research)). In 1981, they also began the publication of ((Mathematics Research and Commentary)) and ((Language Research)) for nationwide distribution. 532

After a great deal of experience in teaching and academic research, the Hua Zhong Industrial Institute is gradually becoming a down-to-earth, brave, daring, and progressive school.

The school heavily stresses the development of mass physical education and exercise, and, as well, extra-curricular activities. In the past 20 years, the Hua Zhong Industrial Institute has been the greatest supporter of the Wu Han track and field activities. In the Education Ministry, the National Health Committee publicly invited units to compete in the 1979 National Collegiate Track and Field Competition. The girl's team from Hua Zhong Industrial Institute took first place overall, the boy's team was fourth overall. In 1980, in the National Collegiate "Three Strongpoints" competition, the girl's team placed third.

The institute has established a Design Research Institute and ten Research Sections. There are three independent research centers. They are: the Machine Engineering Research Center, the Laser Research Center, and the Mechanics Research Center. There is also an Imagery Analysis Section and an Artificial Intelligence Section for research, the Resource Materials Learning Research Section, the Automation Research Section, the Electrician Studies Research Section, the Thermal Physics Research Section, the Ship and Ocean Engineering Research Section, the Chinese Language Research Section, and the Obscure Mathematics Research Center, the Natural Dialectics Research Center, and the Advanced Educational Research Center.

The library has a collection of over 800,000 books. Among them are 240,000 foreign books, and 2,800 types of foreign and Chinese periodicals. Among the periodicals, there are 1,700 that are foreign language periodicals.

In addition to the basic and specialty research laboratories and centers, the school also has two industrial factories to manage, a machine factory and an electronics equipment factory. They are responsible for the mission of making machine and radio electronic parts for student studies, and for the manufacturing and processing of the specialized instruments and equipment required by the academic and scientific research centers. In the past few years, the school has managed the factories with the cooperation of other related research

organizations. They have manufactured on-line processing center machine tools, prototype processing center machine tools, laser welding machinery, high voltage current regulators and equipment, and some 90 other types of modern equipment. Besides this, it produces television component parts, vertical automatic auto-assembly equipment, audio parts, and 50 other various types of equipment, used both in and out of the country.

The school has established a printing house, responsible for the publication of all the written material generated to be used in teaching materials, lectures, technological journals, newspapers, and related materials. Additionally, there is affiliation with a middle school, an elementary school, and a kindergarten, all of which the Institute's staff members and worker's children may attend.

The Institute is also affiliated with a hospital, established to care for the health needs of staff members, students, and workers. All of them may come here for inpatient or outpatient care.

The Hua Zhong Industrial Institute occupies an area of over 2,500 mu. Presently, the constructed facilities on the premises occupy an area in excess of 350,000 square meters.

Current School Administrator: Zhu Jiu Si Wu Han Geology Institute

Campus Address: Wu Chang Yu Jia Mountain, Wu Han City, Hu Bei Province

The precursor to the Wu Han Geology Institute was the Beijing Geology Institute, established in November of 1952. Early in 1918, the first geological institute in our country was established by Beijing University. Shortly afterwards, Qing Hua University, Tian Jin University (originally the Bei Yang University), and Tang Shan Industrial Institute (later changed to the Tang Shan Railway Institute) established geology institutes or geology sections as well.

After the establishment of modern China, in order to suit the economic requirements of our country, with the State Council's approval in 1952, the geology departments of Beijing University, Qing Hua University, Tian Jin\_University, and Tang Shan Railway Institute merged and established the Beijing Geology Institute.

During the initial period of the institute's establishment, there were only 14 professors, six assistant professors, 14 lecturers, and 70 assistant teachers at the Beijing Geology Institute. For example, the famous geology scholar and original assistant administrator for the institute, Professor Qun Zan Xun, the Chinese Science Academy biology section and geology section committee members Qin Sheng Ling and Ma Liang Xing, the geophysics prospecting researcher Fu Cheng Yi, the distinguished geology educators Professors Yi Fu Tang and Zhang Xi Shi, etc., have all held positions as teachers at the Geology Institute.

By the mid-sixties, the school had developed to have eight departments with 21 specialties. Staff and teachers comprised 1,800 people. Among these, 860 members of the staff were teachers. There were approximately 6,000 students in attendance. At the end of 1966, the institute had produced a total of 14,000 undergraduate students, 2,000 technicians, more than 200 research students, and nearly a hundred foreign exchange students for the country.

During the Decade of Turmoil, the institute was completely de-

stroyed. For over four years student enrollment ceased. In 1970, the institute moved to Jiang Ling County in Hu Bei. The name was changed to the Hu Bei Geology Institute. In 1975, the institute again moved from Jiang Ling County back to the Original Vu Han Geology Institute. The name was again changed and the organization became the Wu Han Geology Institute. It was located at East Lake, on the boundary of Yu Jia Mountain, by the southern Wang Shan foothills where the final building occurred.

After smashing the "Gang of Four", the Wu Han Geology Institute was placed under the administrative control of the Ministry of Geology. At the same time, in Beijing, the Beijing Research Studies Section of the Wu Han Geological Institute was established.

Although the Wu Han Geology Institute has gone through many times of moving, and has endured the shadowy presence of the "Gang of Four's" destructive tiger, it has preserved the tremendous teaching strength of the original Beijing University, Qing Hua University, Tian Jin University, and Tang Shan Railway Institute. After the liberation, under the concerned leadership of the Party and the nation, there have been many major developments. Because of this, the school has established a very high level of technology. With rich and abundant teaching experience, the learnings of the elder professors are passed on to the younger professors to form the backbone of teaching strength at the institute. Some of the elders have a great deal of knowledge in the field of geological sciences and, as well, are very influential internationally. Within this corps, there are some very distinguished geology scholars. Moreover, within each sphere of geological studies, they have achieved a relatively high level of literary attainment. For example, the assistant manager for the National Committee on Fossil Studies and, concurrently, the International Earth Sciences' United Chronological Characteristics Committee correspondent Yang Bo Yi, the repatriated Chinese professor, who was also the first assistant manager for the Fossil Studies Committee. The International Earth Sciences' Cretaceous Period Committee correspondent, Professor Chi Tie Dun, who served as a leader in research of fossil studies. Professor Wang Niao Zhen, who conducted research in coral structure. Also, professors Yu Peng Da and Yu

Ver

Chong Wen have achieved great successes in differential mathematics for geologic applications in exploratory prospecting and geo-chemistry. Assistant Professor Yi Jia Zhun, in his research work on volcanic rock, and lecturer Xi Shu Tian and Assistant Professor Yi Jing Jia's work on rock structure of the Pre-Sinian Period have all gained very prominent positions of respect in the country. In aspects of geophysical prospecting, Professors Fu Shi Gui, Xu Yun, and Wang Chong Cang, as well as many other younger teachers who are studying every aspect of geology from electromagnetic wave prospecting and geophysical mine shaft surveying theory and application to various instrument construction, have all received the praise of both the province and the country on numerous occasions. Professor Jie Hou Yi, Assistant Professor Sun Jiao Chuang, and lecturer Zhang Guo Zhu. have, in areas such as rock crushing theory, large mouth oval drilling in rock strata, and new model drill and implement research and development, also received the laudation of the Production Ministry. In aspects of geologic hydrology and engineering, Professor Wang Da Dun and Assistant Professor You Zhao Li have received commendations from various ministries for their research work in Hua Bei agricultural field ground water usage and underground sealed oil stores. In 1978, at the National Science Committee meeting, 10 research articles received commendations. In 1980, during the 26th session of the International Geological Committee meeting, the institute presented 11 different theoretical proposals that received international interest.

Currently, the institute has 98 laboratories. A few laboratories have been established as a core of strength to solve our nation's most difficult geological problems. For example, the Beijing Research Studies Section's laboratories, such as the x-ray experimentation lab, the petro-geological oil production experimental laboratory, and the Rock Analysis Experimentation laboratory, etc. Furthermore, these laboratories are equipped with the most modern equipment and instruments found in the country or abroad; among the equipment is a BS-B model x-ray machine, x-ray light diffractors, HT-1301 spectographs, infra-red spectrobolometric luminometers, atomic absorption analysis luminometers, television microscopes, reflex lens microscopes, 10,000

tons of materials testing machinery, a Wawg 2200 electronic computer, and a DJS-15 electronic computer.

After a while, based on the unique characteristics of the Geology Institute, a style of teaching was adopted that gave most attention to the production of the best graduates possible. In the early sixties, based on the prevailing attitude of the times, an attitude reflected in the motto of 16 characters was adopted. It was "painstaking drilling research, a realistic view of world affairs, a hard and bitter struggle, and a payoff of abundance" (TN: sic.) Not only does the work of a geologist demand academic knowledge, but it also requires a healthy body and a fighting spirit. From the fifties to the sixties, the original Beijing Geology Institute, on many occasions, gained the top collegiate honors of the Athletics Committee; it has delivered 12 athletes (TN: for international competition) to the nation and, furthermore, has produced a large number of mountain climbing athletes. For example, the first people to climb the north slope of Zhu Can Lang Ma Mountain to the peak were Wang Fu Zhou and the female mountain climber and trainer Yi Chang, both of whom were graduates of the Geology Institute.

Presently, the Wu Han Geology Institute has seven departments with 17 specialties. The program of study is four years.

DEPARTMENT OF GEOLOGY

Rock Mineralogy Specialty Exploratory Geochemistry Specialty Stratum Fossil Studies Specialty Geology Specialty

DEPARTMENT OF PROSPECTING Mineralogical Geology Studies Specialty Coalfield Geology Studies Specialty

DEPARTMENT OF ORE ANALYSIS Ore Analysis Specialty

DEPARTMENT OF HYDROLOGY Geologic Hydrology Studies Specialty Geologic Engineering Specialty

DEPARTMENT OF PROSPECTING PHYSICS Prospecting Geophysics Specialty Petroleum Prospecting Physics

DEPARTMENT OF SURVEY ENGINEERING Prospecting Machinery Specialty Prospecting Tunnel Engineering Specialty Drilling and Prospecting Engineering Specialty

DEPARTMENT OF GEOLOGICAL MECHANICS Geological Mechanics Specialty Seismic Geology Section

Additionally, the institute has established six teaching sections, mathematics, chemistry, measurements, English, electronics, and government, each of which has a four year study program.

In 1980, there were 2,414 undergraduate students and 81 research students. Currently, there is a staff of 2,343 people. Among them, there are 946 instructors. Among the instructors are 32 professors and 127 assistant professors. There are 536 lecturers and 251 teachers and assistant teachers.

The school now has 33 academic research laboratories, 11 science research laboratories, and 98 experimentation rooms. Moreover, the school is affiliated with a machine factory, a printing house, an elementary school, a middle school, and a kindergarden.

The library is replete with publications, currently the collection is over 430,000 volumes. There are all kinds of periodicals, with over 4,000 different types available. A new library is presently under construction.

The institute occupies an area of aver 840 mu. Constructed premise facilities occupy an area in excess of 140, 000 square meters, including 12,000 square meters for the Beijing Research Section. Commencement date: November 1 Current School Administrator: 1990 Party Secretary: Zhang Guo Enu

> به مرد میرون میرون

Wu Han Water Conservancy and Electric

Power Institute

Campus Address: Wu Chang Ying Jia Mountain, Wu Han City, Hu Bei Province

The Wu Han Water Conservancy and Electric Power Institute is located in Wu Han City, Hu Bei Province, at the Wu Chang Ying Jia Mountains, beside East Lake. The campus has mountains behind it and water facing it; with green trees growing in abundance, it is an ideal institute for study and research.

The Wu Han Water Conservancy and Electric Power Institute is a conglomeration of the departments, specialties, and sections of 14 various institutions, such as Wu Han University, Tian Jin University, the Hua Dong Water Conservancy Institute, the Hua Nan Industrial Institute, the Beijing Electric Power Institute, Hu Nan University, etc. The majority of its development and establishment can be separated into three stages.

In the first stage, in May of 1950, the original Hu Nan University's Water Conservancy Department merged with the Water Conservancy Section of the Department of Civil Engineering at Wu Han University to form the Water Conservancy Engineering Department at the Industrial School of Wu Han University. From April of 1952 to October of 1953, the Water Conservancy Departments of Guang Xi University, Nan Jing University, He Nan University, Hu Nan Agricultural Institute, Jiang Xi Agricultural Institute, Wu Jing Zhong Hua University, and Hua Nan Industrial Institute merged with the Water Conservancy Department of the Industrial School of Wu Han University, establishing the Wu Han University's Water Conservancy Institute. It established the three departments of Water Construction Engineering, River Port Engineering, and Agricultural Field Water Conservancy.

In the second stage, in 1954, through the decision of the State Council, Tian Jin University, Hua Dong Water Conservancy Institute, Ji Yang Agricultural Institute, and the Agricultural Field Water

Conservancy specialty of He Bei Agricultural Institute merged with Wu Han University's School of Water Conservancy, and, on New Years Day of 1955, was formally established as the Wu Han Water Conservancy Institute, under the administrative control of the Ministry of Higher Education. Two specialties, Agricultural Field Water Conservancy Engineering and Key-located River Hydro-electric Station Construction (originally, some of the river port specialties were transferred to the Hua Dong Water Conservancy Institute), were separated into tow departments. Those departments were the Department of Water Construction Engineering and the Department of Agricultural Field Water Conservancy. In 1958, the specialties of River Management Engineering and Water Conservancy Engineering Construction were added. The four specialties were under the four departments of Agricultural Field Water Conservancy Engineering, Water Construction Engineering, River Management Engineering, and Water Conservancy Construction Engineering.

The third stage, in the summer of 1959, began when the specialties of Electric Power Plant Electro-grid Network and Electric Systems and Hydro-electric Power Station Notive Force Installations were established. An Electric Power Engineering Department was established. The name was changed to Wu Han Water Conservancy and Electric Power Institute, and was directly subordinate to the Ministry of Water Conservancy and Electric Power. In 1961, the specialty of Electric Power-Plant Chemistry was added to the Department of Electric Power Engineering. Towards the end of 1964, the High Voltage Technology and Equipment and Electric Power-plant Chemistry specialties of the Beijing Electric Power Institute were, along with the teachers and students, transferred to this school.

122

From the time of its establishment until 1966, the Wu Han Water Conservancy and Electric Power Institute developed quite a great deal. The number of specialties increased from three to eight, the number of students increased from a little over 1,600 to more than 3,200, the number of teachers increased from 162 to over 546, and the quality of teaching, as well as the scientific and technological level of the school, constantly increased. During this time frame, correspondence courses, cadre classes, and short courses were also offered.

During the Decade of Turmoil, the institute was almost completly destroyed. After crushing the "Gang of Four", the institute earnestly implemented and carried out the Party's guiding principles (TN: lit. 8 characters of) of "reorganization, revision, rectification, and elevation". The full vigor and vitality of the new situation was emphasized.

Currently, the institute has six departments, 13 specialties, and a four year study program.

DEPARTMENT OF AGRICULTURAL FIELD WATER CONSERVANCY ENGINEERING

> Agricultural Field Water Conservancy Engineering Specialty

DEPARTMENT OF RIVER, MUD, AND SAND ENGINEERING

River, Mud, and Sand Engineering Specialty

DEPARTMENT OF WATER CONSERVANCY AND HYDRO-ELECTRIC CONSTRUCTION ENGINEERING

> Water Conservancy and Hydro-electric Engineering Construction Specialty

Electric Power Plant Structural Formation Engineering Specialty

DEPARTMENT OF WATER CONSERVANCY AND HYDRO-ELECTRIC CONSTRUCTION

Water Conservancy and Hydro-electric Engineering Building Specialty

Water Conservancy and Hydro-electric Engineering Machinery Specialty

DEPARTMENT OF ELECTRICAL ENGINEERING

Electric Power Systems and Automation Specialty

High Voltage Technology and Equipment Specialty

Electronic Technology Specialty

DEPARTMENT OF MOTIVE FORCE

Hydro-electric Station Motive Force Installation Specialty

Electric Power-plant Chemistry Specialty

Electric Power-plant Thermo-dynamic Processing Survey and Automation Specialty

Electric Power Plant Metals Specialty



A corner view of the Wu Han Water Conservancy and Electric Power Institute's campus.

In addition to the undergraduate student specialties, the institute also produces researchers in some 60-odd areas of water conservancy, hydro-electric, and thermo-electric studies.

Furthermore, the school has established a correspondence course section, with specialty programs in Water Conservancy Hydro-electric Engineering and Electric Power Engineering that are five years in length for the correspondence course students. Based on the established requirements for water conservancy and hydro-electric (TN: studies), classes are given each year for advanced cadre studies and a specified number of short courses are also given.

In 1980, there were 3,324 students in the school; among them were 3,202 undergraduate university students, 122 research students, 381 student teachers, and 38 cadre in advanced studies. Additionally, there were 175 correspondence course students and 248 short course students (TN: short course is similar to a seminar). In the 26 years since its establishment, the institute has produced 13,657 graduates and 69 research students, including a group of Tibetans and a small number of other minority overseas Chinese people. Also, for the countries of Vietnam, Syria, and Nepal, the institute has produced 82 foreign exchange students and four research students. At the same time, utilizing advanced studies classes, short courses, correspondence courses, and various other types of training, the school has produced over 10,000 cadre technicians and workers for the nation. A portion of the institute's graduates have become the backbone of our technology. Some became managers of industry, and others have become a part of the leadership cadre of various other enterprises in our country's water conservancy, hydroelectric, and thermo-electric production, as well as scientific research and teaching, and the active promotion of their utilization.

Following along with the school's incessant development, the teaching corps has also expanded continually. In October of 1980, the whole school system and a staff of 1,945 people; among them were 834 teachers. Among the teachers, there were 30 professors, 106 assistant professors, 432 lecturers, 15 teacher's aides, and 251 assistant teachers. In order to faise the level of teaching and produce a core of quality teachers, the school selects some of them to go abroad for advanced studies, to participate or investigate, and also requests scholars from within the country and abroad to come to the school and lecture, teach, or engage in other academic, technological activities that will raise the general level of quality for the teachers at the institute.

In the process of establishing the institute, a group of wellknown professors who had achieved many literary attainments were assembled. After producing a group of new, better students, the institute further grew. For example, the distinguished Professor Oian Hu is a well known mechanics scholar whose brilliant contributions to our country expanded the body of knowledge in statically indeterminate structure mechanics. The current school administrator, Professor Zhang Rui Jin, conducted extensive research on the mechanics of river currents, and in other areas such as the physics of transport machinery for river band dredging, river-way circulation,

currents with high sand density, from theory to application, in all of his efforts, he has attained excellent results. He wrote the ((Study of Water Mechanics)) and ((Study of River Current Motive Forces)). Both of these books has had great impact on the science community in our country. Professor Zhang Qun Zhen has long been engaged in research in underground water turbulence; in evaluation of underground water sources and problems in their exploitation, development, and utilization, he has made many contributions. Professor Jie Chang Run, in conducting his extensive research studies in over-voltage protection and mine defense contact dispersal, has made many contributions, including the proposal of a relative dispersion calculation formula, and it has been designated to be outlined in (TN: government) regulations.

Many of the older professors have brought into full play their usefulness as leaders in aspects of academic research activities. The younger generation teachers, diligently working under the wisdom and leadership of the older professors, are achieving excellent results.

VIET

In recent years, the school has energetically developed scientific and academic research activities. In the beginning of 1979, the Water Conservancy Science Research Section and the Electric Power Research Section were established. A construction research section is just in the midst of being equipped and established. Besides often having around 30% of the teachers participating in academic or scientific research activities, the school also has a staff of 80 research personnel. They assume responsibility for the mission of conducting reserach for the departments to which they are assigned.

Before 1966, the school had completed work on 133 scientific research articles. Among them were a few that, at the International Exhibition in Leipzig in 1964 where they were presented, were recognized as being on a level comparable to world technology; for example, the pulsation current velocity measurement instrument. There were some scientific achievements in, for example, the formulas for calculation of river current bank erosion, collective distribution methods for statically indeterminate structures, and non-inter-

spersion methods, as well as formulas for the calculation of the flow capacity coefficient of currents passing through sluice gates, etc. There are also products that have been adapted for use by the scientific research units in our country. Since 1970, even with the interference of expanding numbers of teachers. staff. students. and workers, the institute actively developed research work in academic and scientific areas, and, by the end of 1979, it had completed a total of 212 research articles, some of which have had a very definite theoretical value. Some of them have already been implemented for use operationally. For example, work on the chemical conditions for the first 300,000 kilowatt large scale, sectional, motive force furnace, the experimental 1x7 meter force fed, high load capacity steel roller, the high voltage steel tempering furnace over voltage protection device, research technology on jet pumps, underground water current turbulence and underground water source appraisals, the research work on making a grinder for rock layers for use on dams, field explosives technology, research technology on spray irrigation, research on circulating water cooling systems and stabilization. calculations for conversion of successive-series electric grid networks, as well as laser velocity measurement instruments, power generator plant output measurement devices and large capacity, multiinput synthesizers research, all of which have reached very advanced, progressive levels of technology in the country. In 1978, at the National Science Committee meeting, the results achieved in 9 articles received commendations, 23 articles received commendation from Hu Bei Province's Science Committee meeting, and 12 articles received the laudation of the Water Conservancy and Electric Power section of the National Committees.

-----

In the past 26 years, the institute has gradually acquired a fairly complete assemblage of scientific and academic installations and equipment.

The library occupies a surface area of over 9,700 square meters. There are over 520,000 books in its collection; among them are over 100,000 foreign volumes. There are over 30,000 types of periodicals. There are subscriptions to 1,500 different publications. The institute has also established an information resources center, that

is part of a national and international communications network with more than 900 other units.

Currently, there are 51 laboratories at the institute, each provided with every type of scientific research apparatus and device available.

Athletics facilities include a track, soccer fields, basketball courts, pushball fields, swimming pools, and a 1,300 square meter gymnasium, as well as all types of athletics training equipment.

The school is affiliated with a machine factory and a printing house, responsible for the mission of supporting the teaching and research activities of the institute. It is also affiliated with a middle school, an elementary school, and a kindergarden, provided for the convienence of the teachers and workers of the institute so their children may attend.

The school occupies an area of approximately 750 mu. Presently, constructed facilities occupy an area of 170,000 square meters. Following the development of the institute, the classrooms and installations constantly undergo refurnishing, re-building, and remodeling.

> Commencement date: January 1st Current School Administrator: Zhang Rui Jin 1st Party Secretary: Zhang Ru Bing

G.:.

Wu Han Construction Materials Industrial Institute

> Campus Address: Ying Shi Road, Wu Jing, Wu Han City, Hu Bei Province

The Wu Han Construction Materials Industrial Institute is an institution of higher learning that focuses on the specialties of craftsmanship, machinery, automation, non-metal mining exploitation, construction projects, and each aspect of these specialties.

The precursory organization to the Wu Han Construction Materials Industrial Institute was the Beijing Construction Industry Institute, founded in 1958. At that time, it was the sole school of its kind, subordinate to the Department of Construction Projects. The school had established the Department of Silicates Industries, the Department of Electric Motors and Generators, and the Department of Non-metals Mining. Moreover, there were eight specialties established. They were Cement Craftsmanship, Glass Craftsmanship, Silicates Physics and Chemistry, Construction Materials Production Machinery and Equipment, Electrification in Industrial Enterprise, Extraction Mining of Non-metals. Selective Mining of Non-metals. and Industrial and Civil Construction. The program of study was five years in length. By 1966, there had been seven sessions of undergraduate students enrolled; over 2,500 men and women talented in construction materials and industrial technologies had been produced for the country. At this time, these graduates had become the core of strength for the nation's construction industry technologies, promoting the Four Modernizations of the nation and working towards that end. Additionally, the school was receiving exchange students from the countries of Vietnam and Nepal for advanced studies.

From 1966 to 1976, the school was deeply affected by the destruction of the Decade of Turmoil, and was completely destroyed. Student enrollment stopped for a period of over six years. In November of 1969, the school moved from Beijing to Chang De in Hu Nan. In 1971, it again moved from Chang De to Wu Han. The original Hu

Nan Construction Engineering Institute merged with this school at that time, and the name was changed to the Hu Bei Construction Industries Institute; it was subrodinate to the Province of Hu Bei. At that time there were 439 teachers in the school.

Since 1972, there had been four departments established. Thev were the Department of Silicates Industries, the Department of Electric Motors and Generators, the Department of Non-metals Mining, and the Department of Construction Industries. Students were enrolled in the specialties of Cement Craftsmanship. Construction Materials Machinery, Selective Non-metals Mining, and Industrial and Civil Construction. In 1973, in addition to continuing to enroll students in the above mentioned specialties, there were also students enrolled in the following six specialties: Glassware, Industrial Enterprise Electrification, Non-metals Mining, Water Provision and Replenishment. Construction Materials Standard Products, and Glass Filaments. In 1974. the specialty of Reinforced Plastics was established. In 1976, the Department of New Materials was created. The whole school had five departments, and there were 11 specialties. In five years' time, over 2,000 students had been enrolled; the program of study was approximately three years in length.

In 1973, the Hu Bei Construction Industries Institute became organizationally attached to the Ministry of Construction Materials Industries. In May of the same year, the Hu Bei Construction Industries Institute changed its name to the Wu Han Construction Materials Institute.

The school had five undergraduate departments established: the Department of Silicates Materials Science and Engineering, the Department of Machine Engineering, the Department of Motor Automation, the Department of Non-metals Mining, and the Department of Construction Engineering. Twelve specialties were established: Science of Inorganic Materials, Inorganic Materials Engineering, Adhesive Cements and Products, Complex Materials, Construction Machinery Industrial Automation, Electronic Computers, Non-metals Extraction Mining, Non-metals Selective Mining, Industrial and Civil Construction, Water Provision and Replenishment Engineering, and Municipal Projects. Starting in 1977, the undergraduate student's program of study was limited to four years. Starting in 1978, some specialties began enrolling research students with two and three year programs of study.

In May of 1980, with the approval of the State Council, utilizing the facilities of the original Beijing Construction Institute, the Beijing Research Section of the Wu Han Construction Materials Institute was created. At present, it is still being worked on.

In 1980, there were over 2,300 undergraduate students in the school. There were 73 research students. Staff and workers totaled 1,642 people; among them were 706 teachers (including 74 specialty research staff members). Among the teachers were three professors, 43 assistant professors, 299 lecturers, 226 teachers aides, and 135 assistant teachers.

The school currently compiles for publication on a regular basis the following periodicals: (( The Wu Han Construction Materials Industrial Institute School Paper)) (internationally distributed) and ((The Wu Han Construction Materials Collected Translations)) ( distributed within the country).

The Institute library has a collection of books in excess of 270,000 volumes. Among them: more than 220,000 volumes of Chinese texts and over 50,000 volumes of foreign text. Additionally, there are over 2,000 types of periodicals. Currently under construction is a 10,000 square meter large capacity student conference room, a multi-purpose student conference room, a special conference room for teachers, all of which are provided to create a better environment for student and teacher studies.

The school currently has 46 laboratories, equipped with electronic computers, x-ray diffraction instruments, infra-red light dispersion spectographs, atomic absorption luminometers, high temperature microscopes, expansion devices, conduction coefficient fixed measurement devices, and other instruments and equipment, provided for scientific and academic studies and research. Additionally, there is a complete set of color television video recording equipment and facilities and specialized telephonic classrooms, again provided for use in teaching and conducting academic technology activities.

In aspects of academic and scientific research, the school has established a section with four branches. the Construction Materials Academic and Scientific Research Section. It has the Construction Materials Machine Automation Branch, the Construction Materials Electrification and Automation Research Branch, the Non-metals Mining Research Branch, and the Construction Engineering Research Branch. At present, there is a staff of over 70 research personnel. Until the end of 1979, it was responsible for the research and production of over 190 various scientific research articles or projects. Among them. over 134 had achieved successful results. or stages of success in research. There were 25 articles that attained advanced national levels of technology or replenished the basic industrial enterprises blank spaces (TN: filled the gap). At the National Science Committee meeting in 1978, five research projects received commendations. Additionally, there were 19 research projects that received the praise of the National Construction Materials College Convention and the Hu Bei Province Scientific Committee meeting's members. The research success of the SP type gaseous plasticized cements additives", a breakthrough of foreign technology, in July of 1980, won four National Discovery Awards. New thermal handling equipment technology has been successfully implemented since 1974, in part, due to the success of the research project of "High Power Radiant Ion Nitradizing Agents", and its use has been promoted in many provinces across the country. The granite rock flame shearer was also very successful. Changing from the cumbersome hand cutting methods increased efficiency and productivity twenty-fold. The project "Fixed Measurement Focus of Laser Beams in Rotary Cement Kilns" was also very successful. It is a practical application of laser technology in the cement industry, and it gives the assurance of quality that a large kiln does, it is safer to use, reduces electrical usage, reduces maintenance and waste, and has other useful aspects to it. Brilliant results have been obtained. Also, already being promoted for use in production factories are "glass guaged, crucible seepage planked, variable temperature control instruments". The research work in reinforced plastic rod consecutive binding machines has

been successful in filling in a gap in our nation's consecutive binding (TN: production line terminology) technology. The research work on lightweight plank truss frame construction systems has provided a new system that is, at present, being promoted for use throughout the country because of its excellent results in testing.

The institute has the following affiliated organizations: school managed factories that include a new materials research control factory, a machine factory, and an electronics equipment factory. They are responsible for teaching students in "hands-on" training and a portion of the research work, as well as the mission of producing test equipment for student experiments. The school also manages a printing house, responsible for a portion of the academic materials and printed materials used in lectures. On the campus is a health care clinic (attached to the school headquarters), a kindergarden, and affiliation with schools (including elementary and middle).

The campus occupies an area of 467 mu. Currently, constructed facilities on campus occupy an area of over 120,000 square meters.

Commencement date: September 23rd Current School Administrator: Sai Gang Party Secretary: Hu Bian Wu Han Surveying and Cartographic Institute

Campus Address: Ying Yu Road, Wu Jing, Wu Han City, Hu Bei Province

The Wu Han Surveying and Cartographic Institute was created in 1956 through a merger and reorganization of the specialty schools of Tong Ji University, Tian Jin University, Nan Jing Industrial Institute, Hua Nan Industrial Institute, and Oing Dao Industrial Institute.

In the beginning, there were only four specialties established. They were Survey Engineering, Navigational Photographic Surveying, Astronomy and Earth Surveying, and Map Elueprints. At that time, many of the well-known scholars of the surveying and cartographic community came together to assume positions as teachers. During the year of the school's establishment, only research students and foreign exchange students were accepted for enrollment.

Early in the school's establishment, the name was Wu Han Surveying Charts Institute, and it was subordinate to the Ministry of Higher Education. In 1958, the name was changed to Wu Han Surveying and Cartographic Institute, and it was under the National Surveying and Cartographic Bureau's administrative control.

In 1957, a correspondence course section was established, and in 1958, the specialty of Surveying Instruments Manufacture was established. In 1959, the specialties of Wireless Radio Technology and Computer Technology were established. In 1960, a Computer Mathematics specialty was established.

During the Decade of Turmoil, the school was completely destroyed, and in 1970 it was abolished altogether. In 1973, it started re-building and, in 1974, student enrollment was restored. All figured, student enrollment had stopped for a period of over eight years (TN: 1966-1974).

The Wu Han Surveying and Cartographic Institute currently has six departments with seven specialties. The program of study is limited to four years.

> DEPARTMENT OF SURVEY ENGINEERING Survey Engineering Specialty

DEPARTMENT OF NAVIGATIONAL PHOTOGRAPHIC SURVEYING Navigational Photographic Surveying Specialty

DEPARTMENT OF EARTH SURVEYING Earth Surveying Specialty

DEPARTMENT OF MAPS AND CHARTS Maps and Charts Specialty

DEPARTMENT OF LASER SURVEY AND CARTOGRAPHICS INSTRUMENTS

> Laser Survey and Cartographics Instruments Specialty

DEPARTMENT OF ELECTRONIC SURVEY AND CARTOGRAPHIC INSTRUMENTS

> Electronic Survey and Cartographics Instruments Specialty

Computer Technology Specialty

A Seismic Measurements section was also added to the Earth Surveying Specialty. Beginning in 1978, each academic discipline restored enrollment of research students. Their program of study was established as one of either two, three, or four years.

In 1980, there were 1,872 undergraduate students in school. There were 29 research students. Additionally, a correspondence course section was established. The total number of staff and workers in the school was over 1,340 personnel. Among them were 462 teachers. Among the teachers were 14 professors, 39 assistant professors, 271 lecturers, and 138 teacher's aides or assistant teachers. The establishment of laboratories and equipment was the most important task facing the school. Currently, the school has 23 laboratories. Besides these, another three are under construction. In addition to physics, chemistry, electrical and electronics studies, electronic computers, and other basic or foundational curriculum laboratories, also established are a survey instruments branch, a photographic surveying laboratory, and astronomy and gravity survey laboratories. Presently under construction are four more laboratories. They are the Complete Digital Automation Laboratory, the Non-terrain Photographic Surveying Laboratory, the Remote Imagery Surveying Laboratory, and the Satellite Earth Surveying Laboratory. Furthermore, there are complete sets of color closed circuit television vileo recording equipment, provided for teaching and use in exploiting academic technology.

The school manages a map printing factory and a spectographic instruments manufacturing plant. The most important missions are to serve the school in academic and scientific research, to provide teaching or on the job training, and carry out research project test manufacturing. Simultaneously, every year the school also provides a small quantity of manufactured products to communes based on their requirements.

The library is located in the center of the campus. It has a surface area of 6,350 square meters. Inside the library there are over350,000 volumes of Chinese and foreign texts, and 2,253 types of periodicals. Within the library are student reading rooms, specialized instructor reading rooms, and a resource materials center, provided to enhance the conditions of students and teachers in their reading and academic research activities.

The exploitation of academic and scientific research is the central mission of the institute. Besides each section teaching research and conducting classes, as well as carrying out scientific research work, there is also an organization of specialists engaged in research work---the Survey and Cartographic Sciences Section, with seven specialized laboratories: the Survey Engineering Laboratory, the Survey and Cartographic Instruments Laboratory, the Earth Surveying Laboratory, the Map and Charts Automation Labora-

tory, the Electronics Technology Laboratory, and the Computer Technology Laboratory. They are responsible for carrying out the research tasking of the various offices of the National Survey and Cartographics Bureau. In recent years, in aspects of survey and cartographics theory and methodology, important research projects completed include: Increased Secrecy of Legal Regional Flight Strip Navigation, Probable Differences in Repetitious Water Contour Grid Systems, various straightline streamlining methods, Close-up Photographic Surveying Methodology and Applications, etc. Important research projects being conducted currently include: complete digital automation of survey and cartographic systems, satellite earth surveying, global formation and shape and global gravity fields, survey engineering control grids, the automatic synthesis of data in cartographic production, etc. In aspects of research instrument production, test instruments already produced include: laser collimation devices, laser lead-drawing devices, survey and cartographic specialty used test manufactured electronic computers, infra-red survey devices for vast areas, reversed image camera lens devices, etc. Instruments in the midst of test manufacture include survey chart auto-analysis devices. The school compiles for regular publication the ((Wu Han Survey and Cartographic Institute School Paper)).

The school actively and vigorously encourages development of international technologies and their related activities. In the past twenty years, the institute has had nine national scholars, in the fields of earth surveying, navigational photographic surveying, blueprinting, survey instruments, gravity surveying, survey engineering, etc., that have come to the school to lecture or visit, study, participate in related academic and schientific research, and perform technological work.

The Wu Han Survey and Cartographic Institute is located at the base of Ying Jia Mountain in Wu Han, Hu Bei Province, and occupies an area of 941 mu. Constructed school facilities occupy an area of over 125,000 square meters.

Since the Establishment of the institute in 1956, the Mu Han Survey and Cartographic Institute has produced over 6,856 undergraduates and over 20 research students for the country, as well

as 114 foreign exchange students. For the number of undergraduate students, this is a total of 64 times the number of survey and cartographics graduates of the pre-liberation era. These graduates are among those of the front lines in our country's government, economics, science, and literature management fields, and are contributing individually to the socialist revolution in our socialist country.

> Current School Administrator: Ji Zeng Jiao Party Secretary: Fang Qi Jue

Hua Zhong Agricultural Institute

Campus Address: Shi Zi Mountain, Mu Chang, Hu Bei Province

The Hua Zhong Agricultural Institute was formed in 1952 by the national re-organization of institutions of higher learning when the schools of Hu Bei Agricultural Institute, all of the departments of Wu Han University's Agricultural School, Hu Nan University, He Nan University, Nan Chang University, Guang Xi University, and Zhong Shan University merged to create its establishment. At that time, the school's address was in the original location of Hu Bei Agricultural Institute, and was a treasured asset of the northern suburbs of Wu Chang. In 1957, it moved from there to the southern Wu Chang suburb's South Lake, situated at the foothills of the Shi Zi Mountains. Currently, the Hua Zhong Agricultural Institute is under the administrative control and management of the Ministry of Agricultural Industry.

The precursory organization to the Hua Zhong Agricultural Institute---the Hu Bei Agricultural School, evolved from the School of Agricultural Duties of Hu Bei Province. The School of Agricultural Duties of Hu Bei Province was created and established in 1898. Two departments, agriculture and silkworms (TN: production), were established, with concurrent management of an animal husbandry sciences section. In 1905, it expanded and became an advanced agricultural duties, school with two departments, agriculture and forestry sciences. In 1912, the name was changed to the Jia Deng Institute of Agricultural Industry. Three departments, agriculture, forestry, and silkworms, were established. In 1925, the name again changed to the Advanced Agricultural Industries School, with three departments established. They were agriculture, forestry, and veterinary sciences. In 1931, the school merged with the Hu Bei Educational Institute creating the Department of Agricultural Education. In 1936, it was changed to the Hu Bei Agricultural Industries College. The school address was in Wu Chang, and was a treasure of the locale.

At the time of the War of Resistance Against Japan, the school was moved to En Shi. In 1940, the name of Hu Bei Agricultural Institute was affixed to the school. In 1945, after victory in the War of Resistance Against Japan, it moved back to the original address in Wu Chang. On the eve of liberation, four departments, those of Agricultural Professions, Horticultural Professions, Agricultural Economics, and Botanical Insect Diseases were established. There were 187 students.

The Agricultural School of Wu Han University has over 40 years of history. Since its sponsorship in 1936, it continually increased enrollment in advanced specialty sciences. Student enrollment continued during the period of the War of Resistance Against Japan. In 1946, after the Wu Han University moved back to Wu Han, the Agricultural Institute had just been created, with four departments, Agricultrual Professions, Horticultural Professions, Forestry, and Soil Fertilization.

Before liberation, during the Third Civil Revolutionary Struggle, especially in 1947 when the occurrence of the "June 1st" massacre at Wu Han University took place, the teachers, students, staff, and workers of the Hu Bei Agricultural Institute and the Wu Han University's School of Agriculture, under the direct leadership of the Party, initiated the "anti hunger, anti persecution, anti civil war, the struggle for hot food and warm clothes (TN: idiom), the struggle for freedom, and the struggle for peace" movements. They united to respond to the changing situations on the eve of liberation. They protected the school and preserved its materials, carried out activities to welcome in the liberation, and conducted an unswerving and unyielding struggle against the Nationalist Party's counterrevolutionary movement.

Vic!

In 1952, at the time of the establishment of the Hua Zhong Agricultural Institute, there were five departments with seven specialties, two specialist's courses, and a general technologies group. They were the Agriculture Department, with specialties in agriculture and plant protection, the Department of Soil Agricultural Chemicals, with specialties in soil agri-chemistry, the Department of Horticultural Professions, with specialties in fruit trees and

vegetables, the Department of Animal Husbandry and Veterinary Science, with specialties in animal husbandry and veterinary science, and the Department of Forestry, with a specialty in forestry studies. There were two specialists courses, tea leaves and agricultural statistics, and the general technologies courses. The school had 163 teachers and 334 other staff members. There were 1,193 students enrolled in the school. Later, work to reorganize the departments continued to be carried out. In 1954, the specialist's course in tea leaves was, through re-organization, moved to Jian Jiang University of Agriculture. The veterinary sciences specialty merged with Xian Jiang 81 Agricultural Institute and the Inner Mongolian Institute of Agriculture and Animal Husbandry because of the re-organization. In 1955, the Forestry Department was re-organized and moved to the Nan Jing Forestry Products Industrial Institute.

In 1958, the institute established the Department of Agricultural Industry Machinery, with a specialty in agricultural industry mechanization. The veterinary sciences specialty was restored, and the animal husbandry department was changed to be the Department of Animal Husbandry and Veterinary Sciences. In 1959, the Department of Horticultural Professions split the fruit trees and vegetables specialty and it became the specialty of Iandscape gardening and the specialty of vegetables. In 1960, the Department of Agricultural Sciences added the specialty of Agricultural Physics and Agricultural Weather. The Department of Agri-chemistry established the specialty of soil planning. The Agricultural Machinery Department added the specialty of Agricultural Industries Electrification.

In 1961, based on the guiding principles of the eight characters "reorganize, consolidate, replinish, and elevate", the school again re-organized the departments. Until the eve of the Decade of Turmoil, the school had a total of seven departments with nine specialties. They were the Department of Agricultural Sciences, with a specialty in Agricultural Sciences, the Department of Plant Protection, with a specialty in Plant Protection, the Department of Soil Chemistry, with a specialty in Soil Agri-chemistry, the Department of Animal Husbandry, with apecialties in Animal Husbandry and Veterinary Sciences, the Department of Horticultural Professions, with specialties in Fruit Trees and Vegetables, the Department of Agricultural Machinery, with a specialty in Agricultural Industries Mechanization, and the Department of Agricultural Economics, with a specialty in  $A_{g-}$ ricultural Economics and Management. There were also two other schools, yellow soil consistency and advertising. The number of students was, at its peak, over 2,300.

During the Decade of Turmoil, the Hua Zhong Agriculture Institute went through several moves, abolishment, destruction of the school facilities, equipment losses...the school was on the verge of being dismembered and fragmented.

In 1970, the school stopped managing the Department of Agricultural Economics and, with it, the specialty of Agricultural Economics. The Department of Aquatic Production was established with a specialty in Freshwater Fisheries. In 1971, the Department of Agricultural Sciences added a specialty in Agricultural Microbes. In 1972, the Department of Horticultural Professions was changed and became the Department of Landscape Gardening, with a specialty in Forestry Industries. In 1973, the Department of Agricultural Machinery added the specialty of Agricultural Machinery Design and Manufacture. In 1975, the Hu Bei Agricultural Industry Machinery Vocational College merged with the Hua Zhong Agricultural Institute's Agricultural Machinery Department, and established a specialty in Agricultural Machinery Repair and Maintenance. In 1978, the Department of Agricultural Economics was restored with its specialty in Agricultural Economics and Management. The two schools of soil analysis: and advertising were abolished. The methodology for teaching and scientific research was changed. In 1979, the Department of Agricultural Machinery separated with the Hu Bei Agricultural Industry Machinery Vocational College, and student enrollment in the specialties of Agricultural Machinery Maintenance and Repair and Agricultural Machinery Design and Manufacture stopped.

Currently, the school has a total of eight departments with 12 specialties. They are:

> DEPARTMENT OF AGRICULTURAL SCIENCES Agricultural Sciences Specialty

DEPARTMENT OF PLANT PROTECTION Plant Protection Specialty

DEPARTMENT OF SOIL CHEMISTRY

Soil Agri-chemistry Specialty Agricultural Microbes Specialty

DEPARTMENT OF ANIMAL HUSBANDRY AND VETERINARY SCIENCES

> Animal Husbandry Specialty Veterinary Sciences Specialty

DEPARTMENT OF AGRICULTURAL MACHINERY Agricultural Mechanization Specialty

DEPARTMENT OF LANDSCAPE GARDENING Fruit Tree Specialty Vegetables Specialty Forestry Industries Specialty

DEPARTMENT OF AQUATIC PRODUCTION Freshwater Fisheries Specialty

DEPARTMENT OF AGRICULTURAL ECONOMICS Agricultural Economics and Management Specialty

Except for the 5 year program of study in the Veterinary Sciences specialty, the other specialties have a four year program of study. Also, a Foundational Studies Branch and a Marxism Studies Center were established, responsible for teaching foundational theories and governmental political theory to the school.

In October of 1980, the Institute had 2,365 undergraduate students, 35 research students, and there were also classes for cadre training and advanced studies. There were 2,223 teachers and staff members. Among them, 670 were teachers. Among the teachers, there were 31 professors, 70 assistant professors, 284 lecturers, 38 teacher's aides, and 247 assistant teachers.

The arrangement of the school's specialties reflects the fact that the Hua Zhong Agricultural Institute is a multi-faceted Agriultural University that has many various specializations, including griculture, forestry, animal husbandry, fisheries, machinery, econoics, etc. Modern agriculture is a synthesis of the many specialties' rganic integration, with a mutual infiltration and influence on each other; it benefits the expansion of student knowledge and produces calented men and women with a more well-rounded base of knowledge. It benefits the development of each academic science and the developient and establishment of new academic sciences. It enables the school to advance a step further with an integrative spirit in the direction of such development.

In the course of development for the school, all of the school's teachers and students have carried on teh excellent traditions and conventions of the school, promoting the bitter struggle, with a diligent and economical spirit in management of the institute, they have put into practice the revolutionary style of study for the theories they have come in contact with. In January of 1957, in the commemorative speech, at the inauguration ceremony for the Hua Zhong Agricultural Institute, given by Zhong Bi Wu, he stated " People grow vith perseverence, but perseverence alone is not enough, thrift msut also be practiced, and from thrift arises wealth". The students and teachers of the school have, since that time, endeavored to uphold these words. They have transformed Hua Zhong Agricultural Institute's style of study by bravely putting into prac 'ce the principles of perseverence and thrift.

Since the school's establishment, it has cultivated over 10,300 university students and foreign exchange students, as well as over 40 research students, for the country. There have also been training courses and correspondence courses that have produced thousands of agricultural specialists for the country. The majority of previous graduates are, in cities and autonomous regions throughout all 29 provinces except TaiWan, creating a strengthened faction of agricultural specialists engaged in the front lines of work.

During this time frame, many achievements have been attained in agricultural sciences research. In aspects of botanical seed genetics, through the course of research in long term seed breeding and use of the best varieties of seeds, the end result has been over 30 various types of selectively cross-bred plants, such as rice, maize, cotton, rape (TN: Brassica napus), tangerines, Platycodon grandiflorus, apples,

pears, and other new vegetables or produce. Their use is already being promoted. "The Inadequacies of Brassica oleracea Variet" of Rape in Natural Propagation and Selective Seeding of its Varieties" is an article that received commendation of the National Science Neeting. Selective breeding of the milk vetch (Astragalas sinicus) and the puffball mushroom, fomentation of mushrocm fertilizer, and other successful research projects have caused new fields of science to open up, and their use has been promoted heavily. For our country's rice fields in the southern region, a large area development of Astralagus sinicus green fertilizer has opened up a new source of fertilization for these fields of rice. It has created a rice that can be harvested two seasons a year. The Astralagus sinicus fertilization work has been a very important development for our country. The application of true mushroom selective breeding has come under control and, the production its production, using the technology of successive planting via manual labor is being promoted. This has enabled the production capacity of black edible tree fungus, silver mushrooms (TN: a colorless tree fungus), and edible mushrooms to be multiplied many times. It is of areat value to the developing mountainous regions. In regards to venetables, through gradual seeding control, a revised cultivation and planting. system, and research in planting technology, it has elevated the production capacity of a wide variety of vegetables and provided an abundance of produce, contributing to a solution to the problem of providing vegetables out of season. Articles that received awards at the 1978 National Science Committee meeting include "The Use of Animals in Order to Control Cotton Plant Pests", "Waterpine", "Choosing Pine Tree Resins", "Potassium Nitrate and Sulphur  $CN_2Wi_3$ (7505) Treatment of Blood-infesting Insect Diseases in Draught Oxen", etc. In an American conference in 1980, the advanced research on "Applications of Acupuncture A esthesia in Domesticated Animals" received very high praise. Additionally, research on the morphological analysis of flora has achieved comparatively good results.

From among the corps of instructors, there are many older specialists who are very well known, and some who are just now blossoming. The Professor Zheng Wen Cai is a well known specialist in

Platycodon grandiflorus; he has been engaged in teaching and seientific research work for over 50 years. He has compiled texts such as ((Fruit Tree Research Methodology)) and other books. He has written, among other works, the ((New Fresh Fruit Preservative and Storage Applications)). Before the liberation, the oval seeds of selectivel bred Kikio plants were crossed to create a hybrid. Since the liberation, in the selective breeding of the Platycodon grandiflorus, in all aspects of modern technology in the storage and promotion of Platycodon grandiflorus production, many great contributions have been made. The Professor Chen Hua Gui, long engaged in teaching and scientific research work, wrote ((Studies of Soil Microbes)) as well as other well known books. He edited ((Studies in Nicrobiology)) and other texts. Hany great contributions have been made in research on vertebrate solid nitrogens, soil eradicating microbes in rice fields, and also, the achievements that have been made in the cultivation of talented men and women to work in the field of microbiology are just as significant. Professor Chang Xian Mei is a specialist in the applied use of true fungi, and while simultaneously engaged in teaching and scientific research for a long time, has worked on the task of botanical disease studies. He has written ((Planting and Cultivating Technology for Black Edible Tree Fungus and Edible Mushrooms)) as well as other texts that have achieved profound literary attainments. He has achieved much success in his research work on controlled spore germination of true fungi and their production. Other well known professors in the fields of teaching, cotton seed breeding, maize seed breeding, and other related sciences include Gan Hou Li, Hu Zhong Xi, Zheng YanggChang, Chang Su An, Qiu She Rang, Yao Kang, Yi Po Yu, Wang Bing Ting, You Da Zhuan, Sun Ji Zhong, and Gan Ji Shu.

In recent years, in order to strengthen the exchange of international technologies, the Hua Zhong Agricultural Institute has constantly sent specialists and teachers to foreign countries' advanced institutes of higher learning and research organizations to investigate, conduct scientific research work, or participate in academic conferences. At the same time, foreign exchange students and teachers have been received to study, participate in work, visit, research, or teach.

Currently, in regards to scientific and academic research organizations, there are established seven research centers. They are the Research Center for the Application of True Fungi, the Research Center for Selective Breeding of Platycodon grandiflorus and its Production Theory, the Research Center for Principles of Hybrid Genetics, the Research Center for Agricultural Nicrobes, the Research Center for Organism Physiology and Morphology, the Research Center for Agricultural Economics, the Research Center for Domesticated Animals Nurturing, and the Research Center for Selective Breeding of Domesticated Animals. There is a total research staff of 54 personnel. responsible for serving the related departments of the province of Hu Bei and the nation in its research work. The Institute, along with the Agricultural Sciences Institute of Hu Bei Province, jointly writes the ((Agricultural Sciences of Hu Bei Province)) magazine. They are in the midst of preparations to restore the ((Hua Zhong Agricultural Institute School Paper)).

The institute's library has a collection of over 430,000 books. Among them are 100,000 foreign texts, including the five major languages of English, Japanese, Russian, German, and French. There are 1,240 types of periodicals. There are 30,000 copies of magazines and newspapers, and among them are the five major languages of English, Japanese, Russian, German, and French. The magazines alone number over 15,000 copies. Each department also has established a teaching materials center. This is provided for teaching and research use by the teachers and students.

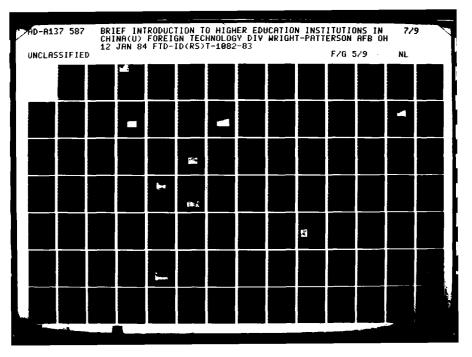
The school has a total of 37 laboratories. The collection of instruments and equipment is fairly complete, adequate to provide for the foundational teaching requirements. The school manares an experimental farm, a microbiological (TN:products) plant, a machine factory, and a veterinary clinic. The school's experimental farm has established an agricultural arts station, a horticultural arts station, and an aquatics production station. Altogether, there are 1,300 mu of agricultural fields, 500 mu of orchards, a 400 mu water plants cultivation area, and a mountain forest preserve of over 1,000 mu. The school's experimental farm teaches five specialties, agriculture, forestry, animal husbandry, ag-by-products, and fisheries.

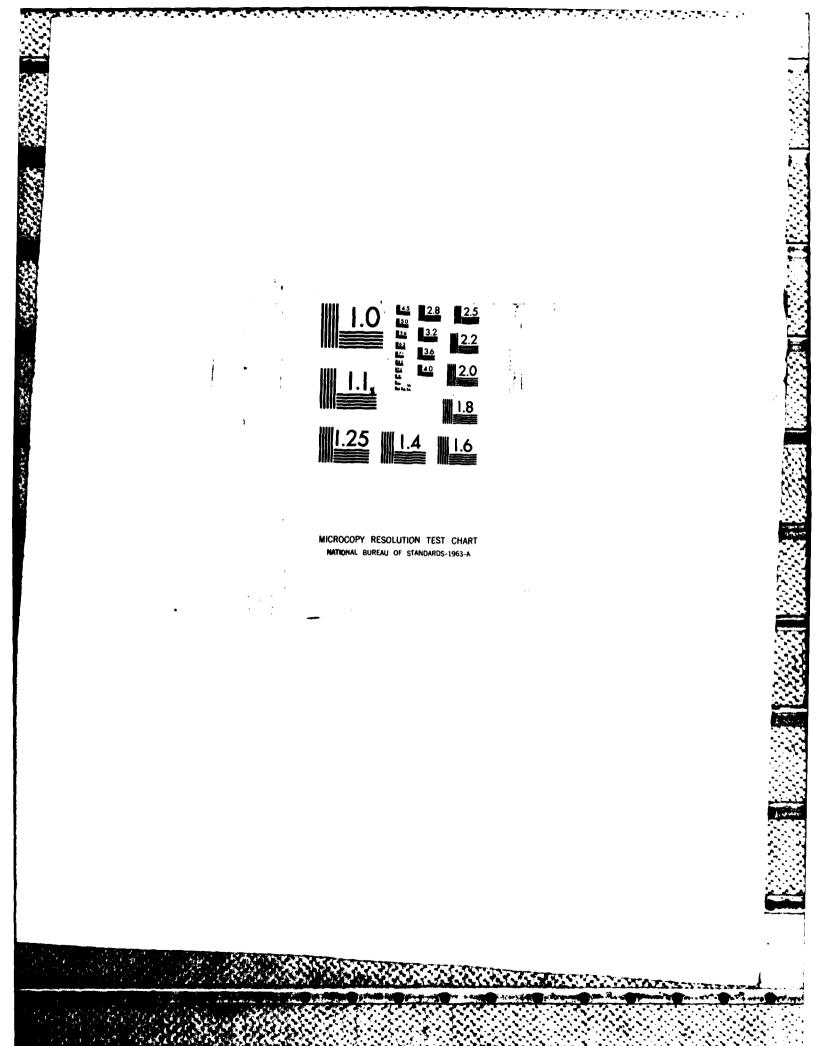
Furthermore, neighboring the campus facilities is an integrated base for teaching, research, and production, to provide beneficial conditions for talented students to go and set examples in production and research work. Besides this, the school has established affiliation with a middle school, an elementary school, and a kindergarden.

The school is situated on Shi Zi Mountain, with a three sided view of the lake; sitting by itself, it has a total calculated area of 5,500 mu. Besides the 3,270 mu of school facilities, laboratories, and fields, the school occupies 2,230 mu of other land. Currently, the houses, rooms, and facilities constructed occupy an area of over 150,000 square meters. There are also the library, a centralized major laboratory, and other teaching and research houses in the midst of construction.

The Hua Zhong Agricultural Institute is in the midst of advancing a further step the four modernizations established by our rovernment for its needs, and possesses the special characteristics of an advanced agricultural institute of higher learning, that of hard work and perseverence.

> Commencement date: January 1st School Administrator: Chen Hua Jui Party Secretary: Zhao Bao Yi







Hu Nan Province Xiang Tan University Campus Addres

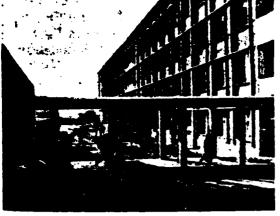
Campus Address: Yang Gu Embankment, Xiang Tan City, Hu Nan Province

Xiang Tan University was founded in June of 1958. The school's address was established in Xiang Tan County by the Yang Jiu Bridge. In August of the same year, Chairman Mao Ze Dong received the People's delegate from Xiang Tan County, and on September 10th, dedicated to the school the name of Xiang Tan University. Under the encouragement of Chairman Mao Ze Dong, within a short time, the school established seven departments in agriculture, forestry, animal husbandry, machinery, iron and steel, education, and finance and trade. 500 students were enrolled.

In July of 1959, the Hu Nan Province re-organized the new institutions of higher learning, and, for a time, Xiang Tan University stopped operations.

On March 14th of 1974, the State Council gave its concurrence for the restoration of Xiang Tan University. It further stipulated that Xiang Tan University become a university integrated with fields of literature, science, and industrial arts. On November 16th of the same year, it was determined that 16 specialties be established. They were Chinese Communist Party History, Philosophy, Studies in Government Economics, History, Chinese Language and Literature, English, Mathematics, Computer Mathematics, Chemistry, Chemical Engineering, Macromolecular Chemical Industries, Environmental Protection, Chemical Industries Instrumentation and Automation, Chemical Industries Machinery, Forging, and Welding. In 1975, on September 10th, the first batch of 250 enrollees started attending classes.

The school emphasized the establishment of a teaching staff, and personnel were actively selected. In October of 1980, the number of teachers and staff workers at the university reached 1,354 people, and among them



were 605 teachers. Among the teachers were five professors, 26 assistant professors, 312 lecturers, and 262 teacher's aides and assistant teachers. The school also invited one American and one Japanese teacher to come and teach.

A view of the Teaching Building of Xiang Tan University.

The school built 23 experimental laboratories in succession, with the ability to conduct 107 experiments (TN: simultaneously),

among them: 69 basic curriculum experiments, 24 special foundational theory experiments, and 14 special course experiments.

The school library currently has a collection of over 550,000 books. Among them are 60,000 foreign texts. There are over 1,200 types of Chinese periodicals, and more than 1,100 types of foreign periodicals.

In the five years since the restoration of Xiang Tan University, it has already given the country 570 graduates. Furthermore, both at the school and away from it, for the Chemical Industries Ministry, the Metallurgy Ministry, and other scientifically concerned parties, the Production Unit has conducted over 20 short-term training classes, training over 1,000 people for every type of specialty. As of 1979, the whole school has students enrolled in 16 specialties, and also has enrollees in the two teaching classes in Japanese and History. Currently, there are 1,529 undergraduate students in the school. Their program of study is four There are ten specialties with a total of 44 research students years. enrolled in them, with programs of study for two and three years. Moreover, there are specialty courses with two year programs in Chemical Industries Cadre Training and Library Sciences in which 115 students are enrolled. The entire school offers 104 courses, including 31 foundational theory courses, 10 common core courses, 56 specialty courses, and seven elective courses.

The Xiang Tan University has developed scientific and research activities, and furtermore, has received a few achievements in its scientific research. In aspects of science and engineering, Professor

Chen Zhong Gu has long been engaged in research on real number algebra, and has written more than ten articles for periodicals such as the ((Compilations of Scientific Records)) and the ((Mathematics School Paper)). Assistant Professor Yang Xiang Qun has been engaged in work on Maldivian Architecture and Structural Research; he has composed more than ten articles and essays for the ((Chinese Sciences)) and ((Annual Mathematics Journal)) as well as other publications. He has also written the book ((Theories in Maldivian Architecture)). Assistant Professor Yuan You Wei has been engaged in research on the mechanics of rheologic breaking, and has written ((The Hechanics of Rheology)) which is in the midst of publication by the Scientific Press Publishing Company. Lecturer Qu Hou Ren has been engaged in research on specialized welding rods. His success has given rise to the 507 types of welding rods that are entered into a machine department's products catalogue. In aspects of literature, Assistant Professor Mai Shu Ge has written ((A Commentary on Ancient Texts and the Presentation Brilliant Imperial River Terminology)), currently being published by the People's Literary Press. Assistant Professor Yin Shi Jie's book---((Theory of Overall Balance)) and Assistant Professor Yang Qun Qiu's book ((Selections of Colorful Phraseology Throughout History)) are both being published by the Peoples Publishing House of Hu Nan. Since 1978, the school has conducted a Scientific Reporting Conference, and a total of 300 articles have been presented. The school has established five research centers: the Research Center for the Thoughts of Chairman Mao Ze Dong, the African Studies Research Center, the Computer Sciences Research Center, the Natural Dialecticism Research Center, and the Rheologic Breaking Research Center. Since 1978, the school has published on a regular basis the ((Xiang Tan University School Paper)) (printed by the Socialist Philosophical Sciences and Natural Dialecticism Studtes Sections). In order to actively study technological findings, in the past two to three years. the school has sent more than 200 teachers to places away from the university to actively participate in the study of technology. More than 100 reports or essays have been received (TN: from these people). Also, on many occasions, well known professors have

. . . ,

been invited to come to the school and lecture.

Currently, the university has established nine departments with 17 specialties. The program of study is four years.

DEPARTMENT OF CHINESE LANGUAGES

Chinese Language and Literature Specialty

DEPARTMENT OF HISTORY Chinese Communist Party History Specialty History Specialty

DEPARTMENT OF GOVERNMENT Philosophy Specialty Government Economics Specialty

DEPARTMENT OF FOREIGN LANGUAGES English Specialty

DEPARTMENT OF MATHEMATICS Mathematics Specialty Computer Mathematics Specialty

DEPARTMENT OF PHYSICS Physics Specialty

DEPARTMENT OF CHEMISTRY Chemistry Specialty

DEPARTMENT OF CHEMICAL ENGINEERING

Chemical Engineering Environmental Protection Specialty

Chemical Engineering Specialty (Temporarily not enrolling students)

DEPARTMENT OF CHEMICAL ENGINEERING MACHINERY

Chemical Engineering Machinery and Facilities Specialty

571

Industrial Automation Specialty Welding Craftsmanship and Equipment Specialty Forging Craftsmanship and Equipment

Specialty

Metallurgical Materials and Thernal Control Specialty

The school has built 39 classrooms. The school manages a factory that is in the midst of being constructed, and currently is producing a limited quantity of electron diffraction instruments.

en alla l'alla l'al

The school has built other schools (including an elementary and middle school) for the children of the staff and workers, and there is a Health Clinic and Kindergarden for their use.

Xiang Tan University is under the administrative control of the Province of Hu Nan.

At present, the school occupies 1,175 mu of land, and constructed facilities occupy a surface area of 75,000 square meters.

> Commencement Date: September 10 Current School Administrator and Party Secretary: Zhang (TN: char. illeg.)

Ji Shou University

Campus Address: Ji Shou Garrison, Ji Shou County, Hu Nan Province

Ji Shou University was established in September of 1958. It was set up in the western autonomous region for the Tu Jia and Niao nationalities of Hu Nan Province, in Ji Shou County at Ji Shou Garrison. At the start of its establishment, there was one class for Chinese and one class for mathematics. There were a total of 93 students. The classes were composed of people selected form the various regions throughout the province to become elementary and middle school teachers. The period of study was limited to one year. There was a class in Machinery, and a class in Metallurgy. There were 91 students enrolled through the examination process. Their program of study was limited to two years. The entire school had only 20 personnel among staff workers and teachers.

From the spring of 1959 to 1960, the two specialties of agricultural machinery and medicine were established. In addition, two midlevel specialty classes in chemical engineering and machinery were established. There were 322 students enrolled in the school and a staff of 54 workers and teachers.

In 1961, as a result of the departmental re-organizations, the two specialties of agricultural machinery and medicine were condensed, and the two middle level specialties were also reduced. Merely the Chinese and mathematics specialties were all that remained. After the students enrolled in the specialties of machinery and metallurgy graduated, further enrollments were discontinued. Afterwards, the school took on the qualities of a teacher's college, and from 1961 to 1965, the number of student enrollments at the school did not surpass 200.

During the Decade of Turmoil, the school was completely destroyed. From 1966 to 1969, for four consecutive years, there were no student enrollments. For the two years of 1968 and 1969, the school was in a state of non-existence; it was not managed at all. The entire student body left the school, and the majority of teachers and staff

workers were sent to the villages to work. In 1970, student enrollment was restored, and the teachers and staff workers returned to the school in succession to work. After crushing the "Gang of Four", the school wsa gradually restored to normal order.

In August of 1978, with the concurrence of the State Council, Ji Shou University became a university integrated with the scientific and teaching specialties of agriculture and forestry, medicine, and teaching, having both undergraduate and vocational courses. From the original Ji Shou Teacher's College and Vocational School, the separate schools of western Hu Nan Province's Xiang Tan University (established in Hua Tan County), and the western Hu Nan Province's Medical School (established in Yong Shun County), there was a reorganization and merger and the school fell under the administrative control of Hu Nan Province. Student enrollment was primarily oriented towards the autonomous region of Xiang Tan, and after the students graduated, they were dispersed throughout the province.

The school persevered in the revolutionary traditions of the bitter struggle, overcame the un-ending difficulties with school equipment and facilities, and developed its teaching activities. From the time of its establishment to present, there have been a total of 2,397 graduates. Among them are 839 minority students (519 of the Tu Jia nationality, 320 of the Miao nationality); for the Xiang Tan Autonomous Region, the school has produced a small group of minority cadre, teachers, engineers, technical personnel, and health workers who are both red (TN: communist) and professionals. The school has also produced a large number of talented men and women to be dispatched out into the province to work.

The school has established a Teacher's College Section, a Farming and Forestry Department, and a Medical Department. There are eight specialties.

TEACHER'S COLLEGE

Chinese Language and Literature Specialty English Language Specialty Mathematics Specilaty Physics Specialty Chemistry Specialty Physical Education Specialty

DEPARTMENT OF FARMING AND FORESTRY Agricultural Machinery Specialty

DEPARTMENT OF MEDICINE Medical Science Specialty

In 1980, there were 1,419 students attending school; among them were 321 minority students (214 people of the Tu Jia nationality, 99 people of the Miao nationality, four people of the Dong nationality, one person of the Yao nationality, and three people of the Hui nationality), or 22.6%. There was a staff of 420 teachers and workers, and among them were 185 teachers. Among the teachers were 2 assistant professors, 43 lecturers (including three engineering teachers and a Chief Physician), 87 teacher's aides, and 53 assistant teachers.

Test

Currently, the school has a portion of its teachers engaged in teaching, and a portion of the teachers are engaged in research work. There are already some viable successes that can be seen. For example: the joint compilation of the science specialties ((A Complete Book of Health Sciences Knowledge)), already published by the Science and Technology Publishing House of Hu Nan Province, for distribution throughout the province. The mathematics teachers have compiled and written ((Data Tables, Calculation Methods, and Theory of Origin in Mathematics for Probable Error Differences and Inequalities with "Least Significant Conditions" and Their Assessment)) and ((A Simple Ten Digit Logarithm Table)) as well as other teaching and lecture materials used in the school for instructional purposes.

Currently, the school has 12 experimental laboratories, with every type of common instrument, numbering over 1,200 devices, that are primarily used for instructional aid.

The school has, since 1980, compiled for regular publication the ((Ji Shou University School Paper)). The first edition was printed by the arts and sciences sections (as a trial) and later sent out for publication.

575

The school library currently has a collection of 150,000 books and, among them, there are 25,000 foreign texts. Additionally, there are 900 different types of periodicals.

The school occupies a surface area of 130 mu. Currently, the constructed facilities on the campus occupy an area of 18,000 square meters. In the first half of19811theschool had built another library, dormitories for the staff and workers, and a student dormitory.

The school is affiliated with the following organizations: a communal rice farm in Feng Liang County, which occupies an area of 109 mu. Organizations managed directly by the school include a kindergarden, where the children of the staff, teachers, and workers may attend, and, as well, an elementary and middle school which are expected to be completed with construction by next year.

> Current School Administrator: Yi Sheng Ao Party Secretary: Yang Guo Xing

Hu Nan University

Campus Address: Yue Lu Mountain, Chang Sha City, Hu Nan Province

Hu Nan University is an institution of higher learning that has perhaps the longest history of any university in our country. Its precursory organization can be traced back to the year 976 AD (the Imperial Song Dynasty started it for nine years) when it was established as the Yue Lu Academy of Classical Learning. Since the beginning of the Academy of Classical Learning's establishment during the Northern Song Dynasty, it has been a part of the history of the Southern Song Dynasty, the Yuan Dynasty, the Ming Dynasty, and the Qing Dynasty, enduring the flames of war; moreover, by restoring itself after each war, the school still exists and flourishes.

In 1903, the Yue Lu Academy of Classical Learning became the Hu Nan School of Advanced Learning, and enrolled students in five classes "to take research in academics from China and the West and give it substance" (TN: a slogan). In 1911, the School of Advanced Learning ceased operations. In 1912, the Hu Nan Exceptional Teacher's Academy of Classical Learning returned to, and integrated with, the Yue Lu Academy of Classical Learning. The name was changed to the Hu Nan Advanced Teacher's School. In 1917, the Hu Nan Advanced Teacher's School ceased operations, and the privately established Industrial Specialist's School from Chang Sha returned to, and integrated with. the Yue Lu Academy of Classical Learning. At that time, the province's educational community members such as Tu Chang Huai Zhong, Hu Zi Jing. Fo Lan Chong, and Yang Shu Da initiated the building of Hu Nan University. In 1924, the advanced planning committee for construction of Hu Nan University was established. In 1926, through the merger of the Industrial Specialist's School and the Commerce Specialist's School with the Legalist's School at that time, the provincially established Hu Nan University came into being. It established four departments. Science, Industry, Legalism, and Commerce. On February 1st. at Yue Lu Nou - in the Academy of Classical Learning began conducting its classes. In 1927, the province decided to abolish Hu Nan Uni-

versity and the departments of Science, Industry, Legalism, and they became the Hu Nan School of Industrial Sciences. In 1928, the province again decided to restore Hu Nan University. Three departments in literature, logic, and science were established. In 1929, the school in compliance with the two directives of ((Methodologies of University Organization)) and ((University Regulations)), changed the departmental structure into separate schools, and each school set up its own departments. After the eruption of the War of Resistance Against Japan in 1937, the school became the nationally established Hu Nan University. In October of 1938, after Wu Han became enemy occupied territory, the school moved westward to the area of Chen Creek in Xiang (TN: Xiang is a classical name for Hu Nan Province). After victory in the War of Resistance Against Japan, in October of 1945, the school moved back to its original location on Yue Lu Nountain.

After 1946, the university on one hand was restoring campus facilities and, on the other hand, was developing institutional departments. By 1947 the university had set up five schools. the School of Literature, the School of Science, the School of Industry, the School of Legalism, and the School of Commerce, and one Letallurgical Research Center. There were nineteen departments. They were: Chinese, Foreign Languages, History, Nathematics, Physics, Chemistry, Civil Engineering, Machinery, Motors and Generators, Mining and Metallurgy, Water Conservancy, Chemical Engineering, Government, Economics, Law, Statistical Methodologies, Banking, Local Economics, and Industrial Commerce Management. There were two vocational courses in Government Calculations and Cooperatives. There were a total of 242 teachers (among them were 90 professors, 10 acting professors, 21 assistant professors, 3 acting assistant professors, 41 lecturers, 4 acting lecturers, and 73 assistant teachers), 110 staff workers, and the number of students attending school had reached 2,048.

Hu Nan University has a glorious revolutionary tradition. In 1912, at the time of the Advanced Teacher's College, the revolutionary martyrs Deng Zhong Fu, Nai He Sen, and Li Ze Chi, among others, were all at this school studying and engaged in revolutionary activities. Mao Ze Dong and Nai He Sen, from 1916 to 1919, on three separate occasions made their homes at the Yue Lu Academy of Classical 578 Studies, heavily engaged in researching major national affairs, organizing a student democracy, leading student movements, and pressing the flames of revolt. In August of 1943, the government of the Nationalist Party sent Li Mai Shao to assume duties as school advinistrator. The students of Hu Nan University initiated the Excell 11 Novement. In November of 1945, the Hu Man University advances the organization of the student's "Centurian Agency", promoting the plogan of "request peace, oppose civil war, request democracy, orgone autocracy". In May of 1946, the students of Hu Man University estable lished the "Committee for the Nationally Established Hu Man University's Opposition to Civil War Novement". They conducted a student strike for the struggle. In June, in order to express their surrort against the "April 1st" bloodletting in Nan Jing, they carried out an anti-hunger demonstration, an anti-civil war demonstration, and an anti-persecution demonstration. In November of 1948, the estatlished "Committee for the Nationally Established Hu Nan Universit" Wants to Eat Novement" and the entire school's students, teachers, staff, and workers began a climactic teacher's strike and student's strike. In order to coordinate the underground armed struggle, the underground party of Hu Nan University sent 90 communist members out to participate in the guerrilla units of central Hu Nan. In Arril of 1949, in order to demonstrate their grief over the "April 1st" massacre in Nan Jing, the students conducted a demonstration. To prevent the Nationalist Party from returning and destroying the school, the school established, in response to the changing situation, a protect the school committee. The school was protected, and liberation was welcomed in.

After the liberation of Chang Sha in 1949, the People's Government continued to manage Hu Nan University. Furthermore, it was decided that the provincially established School of Music, the Man Yue National Teacher's College, the privately established Me Giang Institute, and the privately established Republic College would merge with Hu Nan University. Seven schools of the university were organized. They were in literature, education, social sciences, finance and economics, natural sciences, engineering, and agricultural industry.

There were 26 departments in the schools. The student population had reached more than 4,800, and the school administrator was Li Da. On August 20th of 1950, Mao Ze Dong personally inscribed the school's name as Hua Nan University. In 1952, Gan Xiao Oi visited Ru Nan University. In 1953 a departmental re-organization took place, and Wu Han University, Zhong Shan University, Nan Jing University, Si Quan University, Yun Nan University, Guang Xi University, and Hu Nan University, all of the seven school's departments of civil engineering, railways, etc. merged and created the Zhong Nan Civil Engineering and Construction Institute, which was under the management of the Ministry of Construction. In 1958, it was changed to the Hu Nan Industrial Institute, under the administrative control of Hu Nan Province. In August of 1959, again using the Industrial Institute as a foundation, the Hu Nan University was established as an integrative school of literature, science, and industry. Fourteen departments were established. Student enrollment was on the scale of around 5.000 people. In 1960, the three departments of Railway Construction, Railway Transport, and Bridge Fabrication were moved out and re-organized to establish the Chang Sha Railway Institute. From 1961 to 1963, the re-organization of specialties contin-The geology and geography departments were dropped, and the ued. Chinese Department, the Government Economics Department, and the Biology Department were re-organized as a part of the Hu Wan Teacher's College. Since the last half of 1963, the school has been under the administrative control of the First Ministry of Machinery. The mathematics force department was changed to be the Department of Mathematics: the Chemistry Department and the Department of Chemical Engineering merged and became the Department of Chemistry and Chemical Engineering. In July of the same year, due to the re-organization of Xiang Tan University, the three specialties of electrical conduction, metallurgical protection, and electric motors and generators were gained. In 1964, due to the re-orgainzation of Shang Hai University, the specialty of Automobile Internal Combustion Engines came to the University. In 1965, the sciences (the three specialties of mathematics, physics, and chemistry) ceased to be managed, and there remained the four departments of machinery, electric motors and gen-

erators, chemical engineering, and civil engineering, as well as a foundational studies section. Student enrollment reached over 5,000. During the Decade of Turmoil, the school was under the administrative control of Hu Nan Province. In 1978, administrative control reverted back to the First Ministry of Machinery.

Since the liberation, the Hu Nan University has undergone rapid development. From 1930 to 1949, there were only 3,282 graduates. From 1953 to present, there have been 16,612 graduates. The constructed facilities on campus premises had, prior to liberation, been enlarged by a surface area of over 30,000 square meters, and, to present, have increased an additional 213,000 square meters since the liberation. The university occupies a surface area of 356 mu.

Currently, Hu Nan University has established four departments and one section. There are 23 specialties. The program of study is four years in length.

## DEPARTMENT OF CIVIL ENGINEERING

Industrial and Civil Construction Specialty Public Highways and Bridges Specialty

Water Provision and Replenishment Specialty

Thermal Control and Ventilation Specialty

## DEPARTMENT OF MECHANICAL ENGINEERING

Machine Hanufacturing Craftsmanship and Facilities Specialty Casting and Foundry Specialty

Automotive Specialty

Internal Combustion Engine Specialty

## DEPARTMENT OF ELECTRICAL ENGINEERING

Electric Motors Specialty Electric Power Systems and Automation Specialty

Electromagnetic Measurements Technology and Instrumentation Specialty

Wireless Radio Specialty Computers and Computer Applications Specialty Semiconductors Specialty

DEPARTMENT OF CHEMICAL ENGINEERING Inorganic Chemistry Specialty Basic Organic Chemistry Specialty Porcelain Materials Specialty Carbon Materials Specialty Metal Corrosion and Protection Specialty Analytical Chemistry Specialty

FOUNDATIONAL STUDIES SECTION Applied Mathematics Section Applied Mechanics Section Applied Physics Section

The school is in the midst of plans for the creation of an environmental protection specialty and an enterprise Management Specialty.

As of October of 1980, the Hu Nan University had 4,513 students and 32 research students attending classes.

The school has a staff of 2,718 people. Among them are 1,016 teachers. Among the teachers are 15 professors, 69 assistant professors, 644 lecturers, 78 teacher's aides, and 210 assistant teachers.

In aspects of scientific research, there has been constructed a machinery manufacturing and industrial arts Moulding Research Center. Since the liberation, scientific research work on 563 articles has been completed (statistics used are from the periods of 1949-1959 and 1970 to 1979). There were 266 major research articles, and among them were four that had received results that had reached international levels. Many had reached a very progressive level for within the country. Most distinctive among them were the articles within the realm of foundational theory research, for example, in regards

and the second second

to mathematics, the research work such as "The Existence Theorem of Rieman for Nonlinear Quasi-normality Revealed" and "Nathematical Determinant Natrices for Grinding Strength" which has already set pace in the country as leading works of research. There were two research articles that were read aloud to the International Specialties Committee at their meeting. At the National Science Committee Meeting in 1978, the school had nine successful major research articles that received commendation.

The school presently has 51 laboratories, and has established an electronic computer station. The school has gradually improved student means, and has a color and black and white video recording facility, 60 color and black and white television sets, and three black and white television pickup cameras (TN: minicams).

The school library currently has 680,000 books. Among them are a collection of 150,000 foreign texts. Additionally, there are over 2,350 types of periodicals. Currently, the school is in the midst of building a new 12,500 square meter library.



The library of Hu Nan University.

The school is affiliated with an electric motors and generators factory, with a staff of over 500 workers; it shoulders the responsibility for a portion of the school's teaching of specialties by being geared to student vocational training and scientific research. Additionally, it manufactures the NS1320 high speed grinding machine, 75KW and 120KW synchronous generators, the 120KW synchronous generator sets, 5KVA simulator generator sets, and the Z4006m/m bench drill as well as other products.

In order to suit the requirements of the Four Modernizations of socialism, at present the school's teachers, students, staff, and workers are both highly spirited and highly determined to make Hu Nan University become a school with a unique individual character, and furthermore, to raise the academic level of the sciences through a hardworking struggle.

> Current School Administrator: Zhu Fan Party Secretary: Zhang Jian

Zhong Nan Hining and Metallurgical Institute Campus Address: Yue Lu Mountain, Chang Sha City, Hu Nan Province

The Zhong Nan Mining and Metallurgical Institute was formed through a re-organization and merger of the Metals and Mining Departments of Wu Han University, Hu Nan University, Guang Xi University, and Nan Chang University in October of 1951. In August of 1952, the Geology Department and the vocational classes of metals and mining and ore dressing of Bei Jing Industrial Institute were reorgainzed and merged with the Zhong Nan Mining and Hetallurgical Institute. On November 1st of 1952, the Zhong Nan Mining and Metallurgical Institute was officially established.

Zhong Nan Mining and Metallurgical Institute is a school that takes nonferrous metals and rare metals mining and metallurgy materials industrialization as its primary mission. The specialties are extensive in the school, and science and industry have been united in this institute of higher learning. In the initial stages of its establishmett, it was under the administrative control of the Zhong Nan Educational Ministry. In 1954, the region was, for the most. part, annulled, and the school became subordinate to the Chinese Ministry of Education. In August of 1958, it was put under administrative control of the Ministry of Metallurgical and Mining Industry.

In starting to build the institute, the school adopted the "a bitter struggle, unite to build a school" method of working. It caused the students to nurture a steady and sure, sincere method of work by enduring hardships and working hard, not over-reaching one's aim, not gaining an undeserved reputation, and taking into account the interest of all concerned. During the Decade of Turmoil, the enlightened and superior method of work was destroyed. At present, the institute is still in the midst of being restored, and is promoting the fine conventions of establishment and work as seen in the past. The students of Zhong Nan Mining and Metallurgical Institute come from the various provinces, cities, and regions throughout the country. In 1952 there were 1,696 students attending the school.

In the last twenty years, the school has produced 20,987 graduates for the country. Among them are 20,903 undergraduate students and 84 research students. These graduates are dispersed throughout the country's various major nonferrous metals and mining plants and factories and geologic workplaces.

In building the institute, four departments were established. They were the Department of Geology, the Department of Extraction Mining, the Department of Ore Dressing, and the Department of Metallurgy. Students were enrolled in the four specialties of Geology, Extraction Mining, Ore Dressing, and Metallurgy. After going through many re-orgainzations, there are now seven departments established, and there is one foundational studies section. There are 15 specialties under the departments; the program of study is four years in

length.

Æ



The teaching section of Zhong Nan Mining and Metallurgical Institute.

## DEPARTMENT OF GEOLOGY

General Investigation of Wining Products and Prospecting Specialty Geophysics Prospecting Specialty Prospecting Engineering Specialty DEPARTMENT OF MINING

Mining Engineering Specialty Survey Engineering Specialty Ore Dressing Specialty

DEPARTMENT OF METALLURGY Nonferrous Metals Metallurgy Specialty

DEPARTMENT OF MATERIALS

Metal Materials Specialty

Pressurized Metal Processing Specialty
 Metal Physics Specialty

DEPARTMENT OF MACHINERY Mechanical Engineering Specialty

DEPARTMENT OF AUTOMATION Industrial Automation Specialty Electronic Computer Sciences Specialty

DEPARTMENT OF CHEMISTRY Chemistry Specialty

DEPARTMENT OF FOUNDATIONAL SCIENCES

Technical Engineering Specialty (not yet enrolling students)

There are also specialties in Management Engineering, Applied Physics, and Applied Mathematics, all of which are in the planning stages.

In 1980, there were 4354 undergraduate students and 103 research students attending classes.

In the last 28 years, the teaching staff has continually grown and expanded. At the time the school was built, the teaching staff was only 160 personnel. Presently, the institute has a staff of 3,018 nersonnel. Among them are 1,271 teachers. Among the teachers are 17 professors, 102 assistant professors, 759 lecturers, and 399 teacher's aides and assistant teachers (including a few whose status is undecided). In regards to contributions in academic and scientific research work, some of the more well known professors include:

Professor Chen Guo Da, who is engaged in research on patterns of evaluation in the earth's crust. He has proposed a theory that is gaining momentum, and it has become the new school of thought in geotectology. From the theory, he has expounded on a new type of geotectologic unit, "the active region (in depressions or low lying areas)", as well as Transformation Laws for the rising movement and "fixation" in the development of the earth's crust. He has proposed a new tectonic model for the formation of minerals---the depression model, as well as the characteristic rising of minerals in their formation. The many causes and syntheses of mineral formations in the depression model has undoubtedly opened up a new sphere in the search for mineral deposits.

Professor Chen Xin Min, in regards to theory on pyrometallurgy, hydrometallurgy, and electrometallurgy, as well as the thermal dynamic theory of melting, has accomplished relatively extensive research. The "Thermal Sciences Gaseous Analysis of Metals" and "Integrative Research and Analysis on Magnesium Chlorohydrates" articles have had a definite impact, and have received the laudation of the Chemical Metallurgy community.

Professor Huang Pei Yun helped establish and build the powdermetallurgy industry of our country. Furthermore, he proposed theories of metallurgical agglutination and pressurization, and he has personally conducted many types of research expeditions in search of new types of materials, and has had very good results in his work.

Professor Zhao Tian Cong has been engaged in the teaching of nonferrous metals sciences, and in scientific research work on the same. Currently, he is presiding over and managing research work on hydrometallurgical drilling. In recent years he has written a book of over 500,000 words in length---- "An Investigative Review of Foreign Contributions in Metallurgical Literature and Reference Text" which was widely received among its readers.

The teachers produced after the liberation have also made a few significant contributions. For example, the Department of Machinery's Gu Ke Ling carried out research work that received good results on the topic of "The Machine Principles of Modern Aluminium Foil Rolling Mills Interval Extrusion" which is already being designed for use in aluminium foil factories. At the same time, this theory has been used to solve the damaging technological difficulties of sticking or gumming up that have occurred in the modern Mu Gang 1700 thermal roller drive system's radial gear. Furthermore, to this day, it is still talked about in discussions as a brilliant application of theory. Nathematical Research instructor Cha Hai Te, from his studies at the university, in stages, has carried out research on "Random Number Theory". In regards to "Random Number Theory", there have been very profound literary attainments achieved, and moreover, many theories have been proposed. All of these teachers were promoted to the position of assistant professor last year.

In addition to this, the school has 210 personnel that serve as experimental laboratory workers. Among them are 80 engineering instructors, 100 technicians, and 21 experimenters.

In 1962, the school began the management of a correspondence course program. It established specialties in five areas, geology, mining, ore dressing, metallurgy, and electric motors and generators. From 1962 to 1965 there were a total of 1,167 correspondence course students enrolled. During the period of the Decade of Turmoil, management of the programs ceased. It has now been restored, and 65 correspondence course students are enrolled in the specialties of nonferrous metals and industrial automation. It is adding fore specialties and students year by year.

Since the school's establishment, there have been relatively large developments in scientific and academic research. The school has, in its mission, completed nearly one thousand research articles and test manufactures of products for the country or interested

parties of the area, and, among them, the majority have been successful and are already being used in production. In 1978, at the Nation's, the Netallurgical Ministry's, and the Province's Scientific Neetings, the school received praise and commendation on a total of 62 articles. In 1979, 14 articles of scientific research received commendations from the Ministry of Metallurgy, Hu Nan Province, and Shaan Xi Province. Currently, there are nine research sections. They are established in the areas of geology, mining, ore dressing, nodulizing and briquetting, metallurgy, metal materials, semiconductor metallurgy, aluminium foil, and automation. There is also an electronic computer station. They are furnished with a staff of approximately 300 teachers, specialists, and workers. The school has a fairly strong scientific and technical foundation in the areas of theory of metal mineral formations and prospecting technology, mineral engineering and micro-particle ore dressing, nonferrous metals physics and chemistry, mineral synthesis and application, new materials in nonferrous metals (to include powder metallurgy) and their theory in manufacture construction, and theory and technology in agglutinization and nodulizing, industrial arts in machine rolling of aluminium foil and the theory behind the process, etc. In all of these areas, successful research has been accomplished. For example, in the new school of thought in geotectology --- research in the theory of depression areas, it has received strong support and emphasis from the international geology community. Articles on manmade steel rock drill bits and the complicated, multi-layered drill bits have had brilliant results, and are being put to use in production. They have received the approval of the concerned parties.

Since 1977, there have been 14 issues of the "Zhong Nan Hining and Metallurgical Institute School Paper" that have been published. Moreover, starting from this year on, it is to be distributed for sale to bookstores internationally and nationally. Technical intelligence work has also had a rapid development. The intelligence reporting section of the school has already set up 1,600 units across the country, and 120 have been established internationally for exchange of technical materials and relations. There have been a total of over 20,000 technical and scientific items and reports received.

The school library has a collection of over 510,000 books. There are over 4,000 types of periodicals available.

The entire school complex has, at present, 52 experimental laboratories. In the last twenty years, there have been ongoing new research projects, or stages of projects, and now, they have reached a very definite level of accepted technology.

The school is situated on the Yue Lu Yountain, in Chang Sha City, and the campus occupies an area of 1,087 mu. At present, the campus facilities occupy a surface area in excess of 240,000 square meters.

The school's affiliated organizations include the school managed factories (a machine factory, a powder metallurgy plant, a metal materials plant, and a printing house), a system of schools for the children of the staff, teachers, and workers of the university (to include an elementary and middle school), and a kindergarden and health care clinic.

In recent years, activities to advance the international exchange of technology among schools has developed considerably. Over 30 well known scholars have come to this school in our country to teach or visit for short periods of time, and additionally, ten people, such as Luo La, Chen Xin Min, Huang Pei Yun, and Chen Guo Da have gone abroad to conduct scientific investigations or participate in international technological conferences. In the most recent two years, the country has sent a few other university students abroad for advanced studies or as research students.

いいろう

Commencement Date: November 1 Current School Administrator: Luo La Party Secretary: Yin Bei Cen



Guang Dong Province

Zhong Shan University

Campus Address: Feace and Happiness Park, Xin Gang Road, Hai Zhu District, Guang Zhou City, Guang Dong Province



The South Gate of Zhong Shan University.

Zhong Shan University, whose original name was Guang Dong University, was founded in 1924 by the great revolutionary democracy leader, Mr. Sun Zhong Shan. With the help of the Chinese Communist Party, in 1923, Mr. Sun Zhong Shan established a revolutionary government in Guang Zhou. He issued forth a proclamation to the Nationalist Party for revision of the government to achieve a new republic. The experience and training of the revolutionary struggle enabled Mr. Sun Zhong Shan to deeply understand the importance of establishment and organization of a revolutionary armed force, and the cadre to support the revolution. In 1924, at the time of the establishment of the Huang Pu Ground Forces Officer's School, the nationally established institutions of higher learning, such as the Guang Dong Advanced Teacher's College, the provincially established Guang Dong Legalist's University, and the provincially established Guang Dong Agricultural Specialists School merged to form the nationally established Guana Dong University; the administrator for the school was Zou Ji. In 1925, the Guang Dong Medical Sciences University merged with the school and

this caused the establishment of five sections with 16 academic departments. The 5 sections were Literature, Science, Lemalian, Anniculture, and Medicine. The academic departments were in Dhinese Literature, English Literature, Mistory, Philosophy, and Etucation for the Literature Section. For the Science Section, there were five departments in Mathematics, Physics, Chemistry, Diolony, and Deolon. The Legalist's Section had three departments in Law, Government, and Economics. The Agricultural Sciences Section also had three we untments in Agricultural Professions, Forestry Professions, and Annichemistry. The Medical Section was not broken into departments, and was affiliated with the First and Second Hospitals, as well as a nursing school.

During the initial establishment of Guang Dong University, ir. Sun Zhong Shan would, every week, come to the school and lecture or talk. He encouraged the students to "study and don't rush "ourselved into the revolution; the revolution will not rush itself with studied". From the teachings of Mr. Zhong Shan, it encouraged the teachers and students of Guang Bong University to develop and create the traditions of revolution for Zhong Shan University. Dany of the very important leaders of the Chinese Communist Party, such as Lao Ze Long, Zhou En Lai, and Wu Yu Zhang, all personally came to the university or its affiliated schools to lecture or teach.

Mr. Sun Zhong Shan also wrote the "To Become Learned Scholars, Question it, Ponder it, Make Distinctions, and put Forth a Sincere Effort" training pamphlet.

In July of 1926, to commemorate Mr. Sun Zhong Shan, the Guan-Dong University changed its name to Zhong Shan University.

In June of 1927, the school's system of organization was revised. Under the school administrator, there was a teaching section and a management section, both of which assisted in the management of the school. In the same year, the mathematics department channed to become the Department of Hathematics and Astronomy, and an actronomy station was planned for construction, making a gioneering effort for the development of China; there were also several research stations built.

Zhong Shan University has placed great importance on enlisting the services of talented men and women. In the beginning of Guang Dong University, the well known professors Deng Zhi Yi, Ding Ying, Shi Peng Fei, Fu Hong Nian, Cheng Fang Yu, You Da Fu, Wu Guo. Zhang Ju Bai, and Zhuang Jiang Xuan were engaged. The school Administrator was Guo No Zhe, who concurrently held the post of Head of the Arts Department. After the school became Zhong Shan University. the following people came, in succession, to teach: A Si Jing, Deng Chu Min, Xu De Heng, Ju Gu Gang, Luo Chang Pei, Oian Ping Bai, Yu Yuan Ren, Sun Fu, Yuan, and Bo Oi Nian. In 1927, Hr. Ji Ma Ye's services were engaged to assume responsibilities for heading up the Literature Department of Zhong Shan University. Based on statistics for the first half of the year 1927, the Zhong Shan University had a total of 87 undergraduate professors, and 44 preparatory course professors, totaling 131 personnel. There were over 900 undergraduate students, and over 700 preparatory course students, for a total of over 1,600 students at the school.

From 1927 to 1937, the Zhong Shan University incessantly developed. On the Huang Mountain's stone tableau in the eastern suburbs of Guang Zhou City, on the Ye Ridge of Huang Mountain, the new campus was built, and it occupied an area of 1,200 million in 1935, a research institute was constructed and enrollment of research students began. Until 1938, the entire school had developed to the point that it encompassed seven institutes in literature, science, legalism, industry, agriculture, medicine, and teaching. There were 31 departments.

In October of 1938, the Japanese Army encroached upon Guang Zhou, and the Zhong Shan University moved westward to the Mei River. In 1940, it moved back to Ping Shi in Northern Guang Dong. In the summer of 1944, it again split up and moved to the various areas of Shen Shan Lian County in Northern Guang Dong, Ren Hua and Xing Ning in Eastern Guang Dong, and Mei County. Under extremely difficult conditions, they managed to support and maintain the school.

In September of 1945, after victory in the Mar of Resistance Against Japan, the scattered elements of the Zhong Shan University,

teachers and students, moved back to Guang Zhou. A group of well known teachers, such as Wang Li, Tan Qi Yang, Zhu Jian Zhi, Zhong Heng Wen, Li Na Hua, Liang Bo Qiang, Ding Ying, and Chen Huan Kang were engaged to serve as teachers, academic researchers, or educational workers. The results of this were very good.

The students of Hua Nan University gradually became the central student body of Zhong Shan University as they were moved in over a period of time. In support of the 1925 harbor worker's strike, the "June 23rd" anti-imperialism movement, and other revolutionary movements, the students of Zhong Shan University have, in all cases, been the vanguards of these activities. In 1927, when the "Arril 15th" revolutionary coup d'etat occurred in Guang Zhou, the Zhong Shan University students actively participated in revolutionary activities of the Chinese Communist Party-organized Guang Zhou Revolutionary Committee. After losing the struggle in the revolt, the wounded and dead among the Zhong Shan University students and teachers numbered over 300 people; the student leaders, communist party exponents, and the female Communist Party's invincible army were bravely sacrificed for what was right. In the "September 18th" affair, the Zhong Shan University students actively participated in the Japanese Resistance Struggle, conducting enemy resistance movements and organizing enemy resistance propaganda units. In July of 1937, when the War of Resistance Against Japan erupted, a group of Zhong Shan University students walked to the school gate and participated in or joined the Guang Dong Japanese Resistance Guerrilla Unit. At the time of liberation in the struggle, the Zhong Shan University students and teachers who were under the leadership and guidance of the Party, supported and maintained activities for a People's Democracy in the struggle for the people's liberation. On May 31st of 1947, they conducted the "anti-hunger, anti-civil war" demonstration, and in April of 1949 in the "July 23rd" anti-authoritarian power incident; Professor Nei Gong Xing and over 160 progressive students like Giu Lin were arrested. After many rescue attempts, they were finally able to escape. 0n the eve of liberation for Guang Zhou, in opposition to the sinister plots of the authorities, the Zhong Shan University students moved

back to Hai Nan Island, and later to Tai Man. Nost of the other teachers and students carried out a vigil to protect the school, and resultingly, the Zhong Shan University was, in its entirety, completely protected.

On October 14th of 1949, Guang Zhou was liberated. The Zhong Shan University started a new page (TN: in its history).

After the liberation, the school set out to re-organize and align the departments. In 1952, the National Re-organization of Institutions of Higher Learning took place. The Your institutes, industrial, agricultural, medical, and teaching, of Zhong Shan University separated from the school. Each was independently established as the Hua Nan Industrial Institute, the Hua Nan Medical Institute, the Hua Nan Agricultural Institute, and the Hua Man Teacher's College (the Hua Nan Medical Institute was later changed to the Zhong Shan Nedical Institute). The departments of astronomy, reology, philosophy, language, humanities, economics, government, and law were each, in succession, organized into their own schools. After going through the re-organization, they took the original Zhong Shan University and Ling Nan University's literature and science schools as a foundation, and furthermore, added the related departments of the regions of Guang Zhou and Zhong Man, and began another re-organization, creating the integrative Zhong Shan University. with eight departments. These were Chinese Language and Literature, Foreign Language and Literature, History, Mathematics, Physics, Chemistry, Biology, and Geography. The University's original address on Huang Mountain's eastern tableau in Guang Zhou was moved back to the southern Kang Yue Ridge of Ling Nan University's original address.

After the institution's departmental reorganization, the departments of language, philosophy, humanities, astronomy, and geology were abolished, and moved with them were the department chiefs and teachers, such as Wang Li, Zhu Jian Zhi, Yang Cheng Shi, Yu Ou Min, Chen Guo Da, etc. However, during this re-organization, a group of specialists and professors such as Chen Xuan Ge, Liang Fang Chong, Yang Chuang Guo, Rong Qu, Zhong Nei Ji, Huang Liu Ling, Mei Li Fu, Zheng Zeng Tong, Gao Tao Lan, and Chen Xuan Jing were moved in in their place. The teaching corps was strengtheded and the various

LALACTER PROPERTY

departments such as literature and history were even more outstanding.

After the institutions were re-organized, based on the importance of an integrative school producing talented men and women for academic and scientific research and teachers for institutions of higher learning and middle schools, a complete revision of teaching methods occurred. It provided training that strengthezed the foundations of science, general knowledge, and basic abilities of the students. Starting from 1954 on, the teaching revision has shown gradual success. It has developed to include organized plans for the conduct of research work; furthermore, in actuality, it has gradually become intimately united in practice with teaching and foundational theory research for Hua Han Region's economic establishment and, as well, the central orientation point for research of the torrid zone and the sub-tropics region. This has elevated each specialty science's development and improved the quality of classroom teaching. In normal differential equations, macromolecular chemistry, biological control of pests, parisitology, Guang Si/ Guang Dong geography, flora of Hua Nan, history of the Sui and Tang dynasties, economic history of China, the 1911 revolution, and research on Sun Zhong Shan (TN: Sun Yat Sen), paleography, poetry of the Yuan Dynasty of the zaju and sanqu type, English and American literature, history of ancient Chinese thought, southeast Asian history, and other research areas, outstanding achievements and results have been obtained. Moreover, each area has given itself individual and unique characteristics.

VEED

Before theDecade of Turmoil, the entire school had nine departments with 19 specialties (actually,students were enrolled in only 17 specialties) and there were 4,177 students in attendance.

During the Decade of Turmoil, the school was totally destroyed and stopped student enrollment for over four years.

After smashing the "Gang of Four", and going through restoration and re-organization, the school has again begun to develop.

Currently, the school has 16 departments with 24 specialties. The program of study is four years in length.

DEPARTLENT OF CHINESE LANGUAGE AND LITERATURE

KANA AN

3773-3773

Chinese Language and literature Specialty

. . . .

DEPARTMENT OF HISTORY History Specialty Archaeology Specialty

DEPARTMENT OF PHILOSOPHY Philosophy Specialty

DEPARTMENT OF ECONOMICS Economics Specialty

DEPARTMENT OF LAW Law Specialty

DEPARTMENT OF FOREIGN LANGUAGES English Language Specialty Japanese Language Specialty German Language Specialty French Language Specialty

DEPARTMENT OF MATHEMATICS Mathematics Specialty

DEPARTMENT OF MECHANICS Mechanics Specialty

DEPARTMENT OF COMPUTER SCIENCES Computer Mathematics Specialty Computer Software Specialty

598

DEPARTMENT OF PHYSICS Physics Specialty

DEPARTMENT OF WIRELESS RADIO ELECTRONICS Wireless Radio Physics Specialty

DEPARTMENT OF CHEMISTRY Chemistry Specialty

DEPARTMENT OF BIOLOGY Zoology Specialty Botany Specialty Biochemistry Specialty

DEPARTMENT OF GEOGRAPHY Natural Geography Specialty Economic Geography Specialty



A view of the Xing Pavillion of Zhong Shan University.

DEPARTMENT OF GEOLOGIC SCIENCES Geology Specialty

DEPARTMENT OF METEROLOGY Meterologic Sciences Specialty

In 1980, there were 4,608 undergraduate (four year program) students, 200 vocational (two year program) students, 257 research (three year program) students, and seven foreign exchange students at the school.

There was a total starf of 2,938 personnel. Among them were 1,282 teachers. Among the teachers were 03 professors, 75 assistant professors, 617 lecturers, 154 teacher's aides, 307 assistant teachers, and 86 interning assistant teachers. There were 13 foreign instructors invited to teach. There were two professors from the United States invited to instruct.

There are 26 research organizations established, with 327 research personnel. They are:

> Pestilence Research Institute; Macromolecular Research Institute (with three research sections established under it); Environmental Sciences Research Institute (with the Environmental Sciences Foundational Theories and Methodology Research Center and the Environmental Radiation Measurements Research Section established under it);

Mathematics Research Institute (with the Probability Statistics Research Center, the Computer Mathematics Research Center, and the General Bifferential Equations Research Center established under it);

the electronic computer center; gravitational research section; the laser optics and spectroscopy research section; basic electron theory research section; Asian millimeter wave research section; solid physics research section; hydro-motive force research section; catalysis research section; natural organic chemo-physics research section; the river port and seashore research section; icthyological sciences research section; botanical sciences research section; genetics research section; parisitology research section; southeast Asian history research section; population theory research section; Sun Yat Sen Research Section; Progressive Nodern Chinese Philosophy and History -Research Section; and the English and American Literature Research Section.

The majority of teachers in both teaching and research work have made huge contributions. At the 1970 National Science Committee meeting, 24 research projects received commendation (among them were five mathematics articles, five physics articles, six chemistry articles, four biology articles, and four geography articles). Take, for example, the Biology Department's Pu Zhe Shi, who has long been engaged in research work on the biological control of pests, and moreover, has promoted its application for use in production. He has edited the ((Origins and Hethodology of Biological Pestilence Control)), and it has received international recognition. The Biology Department's Zan Yi Hua, has long been engaged in the cultivation and production of various species of freshwater fish. He has obtained verw encouraging results. Lin Xiang An of the Chemistry Department has been engaged in teaching macromolecular chemistry and research work in this area for a long time. He has obtained significant results both in theory and practice. He has edited the ((Hacromolecular Chemistry)) text book that is used as the standard text in institutions of higher learning. Li Ji Sheng of the Computer Sciences Department has advanced the research work in solving systems of differential equations, especially in the theory and application of random number patterns, where he has made significant contributions. He wrote ((Nethodology of Random Number Patterns)), and is the first scholar of our country to specialize in random number patterns. Li Hua Chang and Na Shi Hong of the Physics Department have, for many years, been engaged in basic electron theory research. In 1980, at the international Electron Science Conference in Guagn Zhou, Li Hua Chong presented the standardized reports for China, and they received very high praise from the international physics scholars at the conference.

Since its. initial establishment, Zhong Shan University has, along with other insititutions of higher learning and scientific and technical research organizations, carried out an information exchange program. Moreover, specialists have established a foreign relations section that is responsible for the planning and selection of exchange students and teachers to go abroad for advanced studies.

Each time that this has occurred, they have also invited foreign instructors to come to the university and assume positions as teachers, lecturers, or speakers. Several well known professors, such as Ma Ji Zhao, Yang Chuang Guo, Lou Jian, Zhou Yan Man, Shi Kang Mu, etc. have also been invited to go abroad to lecture or participate in related international technological conferences. In addition to this, with other well known foreign universities, research organizations, technological research teams, and libraries, the school has maintained an exchange of textbooks, periodicals, and research essays.

In the four years since crushing the "Gang of Four", the Zhong Shan University has greatly expanded the development of activities related to the international exchange of technology, and with the universities of several foreign countries, they have established interschool liason departments; for example, when Huang Huan Shi served as Chief of the delegation of teachers that visited several universities in Hong Kong. Professors and specialists Huang Huan Shi, Xia Shu Zhang, Zhang Si Da, Jiang Oing Bo, Lin Tai Fang, Chen Jia Yan, and Zhang Tun Yang were invited to leave our country and visit, or to participate in international technology conferences and give lectures. Since 1977, there have been 40 exchange students and advanced studies instructors that have returned from overseas, and a total of 15 foreign instructors have been invited to the school.

The Zhong Shan University library has established exchange programs with 60 research units of ten foreign countries.

From 1951 to 1980, the Zhong Shan University has produced a total of 21,299 undergraduates, 410 research students, and 72 foreign exchange students.

Zhong Shan University is currently under the administrative control of the Ministry of Education.

The university regularly publishes the ((Zhong Shan University School Paper)), an analytical sciences community publication, and a natural sciences publication. All of them are journals.

The Zhong Shan University library currently has a collection of over 2,400,000 books. Among them are 110,000 foreign texts. In addition to this, there are 14,680 periodicals available.

The university has three school-run factories: a scientific teaching instruments factory, a plastics factory, and a printing house. Affiliated organizations include an elementary school, a kindergarden, and a health care clinic.

The school currently occupies an area of 1,725 mu. Constructed facilities on campus premises occupy a surface area of over 220,000 square meters.

> Commencement Date: November 12 Current School Administrator and Party Secretary: Huang Huan Qiu

Ji Nan University

Campus Address: Shi Bei, Guang Zhou, Guang Dong Province

Ji Nan University is an integrated school of literature, science, medicine, and economics. Its primary purpose is the enrollment of overseas Chinese students, students from Ao Men, Tai Wan, and concurrently, the enrollment of a few students from within the country. Most important, however, is the enrollment of returned overseas Chinese and the relatives of Chinese nationals living abroad.

The precursory organization to Ji Nan University was the Ji Nan Academy, established during the Governor-general Duan Fang Yu's 32 consecutive years in office (till 1906) in Nan Jing. Its primary mission was the enrollment of the children of overseas Chinese in Nan Yang. In 1911, when the destruction in Qing Ting occurred. the academy ceased operations. In 1918, through the support of Huang Tan Pei, the school restored operations. The name was changed to the Ji Nan School. Two courses were established. They were in teaching and commerce. In 1919, school classes were formally organized, and during the next three years, two more courses in literature and science were established. In 1921, the specialized course in commerce was moved to Shang Hai, and then it merged with Dong Nan University and established an institute of commerce. During this year, the University of Commerce established itself independently and, at the same time, set up segregated departments for males and females. In 1923. the male's department moved back to Zhen Ru in Shang Hai. The female's department was also moved to Zhen Ru. The school divided itself into three other schools, an elementary and middle school, and a college. The college established institutes in commerce, literature. science, law, and education. There were 1,700 students in attendance at the three schools. In 1932, on January 28th, the Japanese Army encroached, and Zhen Ru became enemy occupied territory. The students dispersed to the three areas of Ban Zhou, Guang Zhou, and Shang Hai to attend classes. This continued until September when

all of the students returned to Zhen Ru. After the "July 7th" incident in 1937, the "August 13th" incident occurred in Shang Hai, and Zhen Ru was then facing the front lines of the war. The school could not be managed: therefore, the school moved into the American and French concessions of the city to conduct classes. In the winter of 1940, in Jian Yin of Fu Jian Province, several branch schools of Ji Nan University were established. In June of 1942, the rest of the school, in its entirety, moved to Jian Yin. After victory in the War of Resistance Against Japan, in June of 1946, the school moved back to Shang Hai from Jian Yin. However, the schools at Zhen Ru were completely destroyed in the flames of war. The only recourse was to hold classes on a temporary basis at the various schools on Zhu Shan Mountain Road, Ti Yu Road, and several other school locations. With great effort, the school managed to conduct its classes. When Shang Hai was liberated in 1949, at the time when all of the institutions of higher learning were being re-organized, the Ji Nan University ceased operations, and each of its institutions and departments merged with or entered the various institutions of Fu Dan University.

Based on the developing needs and circumstances both within the country and abroad, and based on the requirements of the overseas Chinese and the compatriots from Ao Men, the State Council approved in 1958 the re-construction of Ji Nan University at Shi Bei in Guang Zhou. Classes began on September 24th of the same year. Ji Zhu was appointed as the Director, and Liang Qi Da served as Party Secretary. In 1962, Chen Xu Jing became the Director. In 1964, Yang Kang Hua became the First Party Secretary and School Administrator. On February 9th of 1963, a Board of Trustees was established, and Yi Cheng Shi served as its Director. Five departments and preparatory courses were initially set up. They were in mining and metallurgy, aquatic production, sea navigation, Chinese, and history. In 1960, the three departments of mining and metallurgy, sea navigation, and aquatic production separated from the university and each became an independently established institution. After going through several years of reorganizations, actually, until 1966, the Ji Nan University had developed on a relatively large scale to become an institution integrated

with literature and science. It opened up nine departments in mathematics, physics, chemistry, biology, Chinese, history, economics, foreign trade, and foreign languages, as well as a research organization for Southeast Asian studies. The number of students attending the school had reached 2,927, and among them overseas Chinese students and students from Ao Men occupied 68.4% of the student body. At this time, 4,289 undergraduate students had been produced, 1,025 preparatory students had been trained, and 190 accounting specialists had also been trained.

Just at the time when Ji Nan University was developing for its betterment, it was destroyed in the Decade of Turmoil. In 1970, the Ji Nan University was once again abolished, and each of its departments and units separated from it and merged with Zhong Shan University, Hua Nan Teacher's College, the Guang Zhou Foreign Language Institute, and the Guang Dong Chemical Engineering Institute, The campus sat idle and no students were enrolled for 12 years.

After smashing the "Gang of Four", the State Council decided to restore Ji Nan University in the summer of 1978. Planning began in March, and on October 16th classes began. Yi Cheng Shi served as Director of the Board of Trustees for Ji Nan University, and Yang Kang Hua served as both First Party Secretary and School Administrator.

Although the Ji Nan University has endured shutdowns and has travelled along a circuitious path, it has, however, always kept its socialist patriotism through the bitter struggles, always having sought the truth, dilligently studied, emphasized learning, bravely and tenaciously strived for betterment, and retained an indominatable spirit of study; after liberation it has grown even more. In the past seventy years, Ji Nan University has produced a great quantity of talented men and women. They are spread out over each area of the country and over the five continents of the world, making significant contributions towards the causes of the people's liberation of China, the socialist revolution and its further establishment, and mankind's progress in our world.

Ji Nan University is fairly emphatic about engaging the services of talented men and women. Before the liberation, the school engaged the services of a large number of talented, superior teachers, for example Zhou Jian Ren, Zhang Pu Zhe, Guan Zhan Zhen, Mia Mano, Jo. Chu Min, Xian Chi Shi, Wang Tong Zhao, Fu Qu Ren, Zhou Bong Cheng, Zhou Zi Tong, Kan Da Jie, Kan Fei Nian, etc. After establishment in 1958, there were also a group of well known professors and stecialists whose services were engaged, such as Wang Yue, Huang You Mou, A Jia Gui, Su Jian, Mo Jie Qin, Hu Wen, Long Da Ren, Can Wi Kua, and Zong Ji Sheng.

Ji Nan University currently has ten departments with 14 specialties. With the exception of the six year program of study for the medical students, the programs of study are four years in length.

> DEPARTMENT OF CHINESE LANGUAGE AND LITERATURE

> > Chinese Language and literature Specialty

DEPARTMENT OF FOREIGN LANGUAGES AND LITERATURE

Foreign Language and Literature Specialty

DEPARTMENT OF HISTORY History Specialty

DEPARTMENT OF JOURNALISM Journalism Specialty

DEPARTMENT OF ECONOMICS

Government Economics Specialty Industrial Economics Specialty Commercial Economics Specialty International Finance Specialty Accounting Specialty

DEPARTMENT OF MATHEMATICS Mathematics Specialty DEPARTMENT OF PHYSICS Physics Specialty

DEPARTMENT OF CHEMISTRY Chemistry Specialty

DEPARTMENT OF BIOLOGY Biology Specialty

DEPARTMENT OF MEDICINE Medical Specialty

Additionally, a Specialist's course in accounting and one in advanced Chinese language studies have been established. The program of study for these programs is two years.

In 1980, there were 1,657 undergraduate students in attendance. Among them were 79 overseas Chinese, 443 students from Ao Men, and 20 students from Tai Wan. There were 196 students who were relatives of Chinese living abroad. The overseas Chinese came from the countries of Japan, Korea, Thailand, Burma, Vietnam, Kampuchea, Laos, India, Mauritius, Australia, England, and Peru. They came from 17 countries altogether. There were 48 research students in school, and there were 22 advanced studies students in attendance.

Scientific research organizations include:

a Southeast Asian Research Center, with the three sections of Eastern Mongolian Studies, the Overseas Chinese Study Center, and Indochinese Studies Center established under it.

There is an Economics Research Institute, with six organizations for socialist economic problems, overseas Chinese economics, modern enterprise management, Ao Men economics, commodity pricing, and population theory established under it. The institute for the study of Overseas Chinese Problems, with 3 sections of Overseas Chinese History, Overseas Chinese Literature in Hong Kong and Taiwan. Also, there is:

Research Center for Song Dynasty History; Orthopedics Research Center; Research Center for Computer Applications in Medicine; Research Center for Immunolog<sup>4</sup> cal Sciences;

Research Center for Plant and Animal Immunity; Research Center for Heat Generation; Research Center for Aquatic Organisms; Research Center for Miniaturized Electronic Semiconductors; Research Center for Applications in Solid Molecular Theory; Research Center for Macromolecular Materials in Medicine; Research Center for Membrane Separation; Research Center for Mathematics and Accounting.

Currently, there are 264 full-time research personnel, and among them are 72 social sciences researchers and 192 natural science researchers.

There are 69 laboratories at the school, including some modern educational facilities such as the Computer, Electrochemical Education, and Language Laboratories.

After the resoration in 1978, aside from the original foundation of personnel the returned to Ji Nan University, a large corps of teachers and cadre were moved in to serve as the backbone of the staff. Currently, the school has a staff of 1959 personnel; among them are 777 teachers. Among the teachers are 24 professors, 65 assistant professors, 480 lecturers, 153 teacher's aides, and 55 assistant teachers. Also, there are three American professors who have been invited to teach. Among the newly arrived teachers are pharmacological specialist Meng Ti, surgical specialist A Gong Dao, torrid zone disease specialist Mou Shi Hai, optometrist Li Zhan, biochemistry scholar Ren Bang Zhe, Song Dynasty scholar Chen Yue Xu, etc. Additionally, there is the pathologist Yang Jian, solid physics scholar Jin Ying Zhu. The employee Qun Shou is a teacher and administrative specialist for Ji Nan University. Furthermore, the famous professors Chen Sheng Shen and Li Zheng Dao are invited guests teaching at the schoo

In teaching, Ji Nan University has united the special characteristic of the students from Ao Men and the overseas Chinese, and has emphasized the application of the foundational theories in science and their unification. In has placed emphasis on study of foreign languages and electives. Moreover, in the studies of the two departments of Chinese and Physics, the quality of teaching has constantly improved.

Several professors and assistant professors have, in aspects of scientific research work, achieved significant successes: the research carried out by Meng Ti on the Chinese produced devilpepper, moreover, the trial run successes of "pressure reduction efficiency" (TN: ref. to project name), which has already received the laudation of the health community, and initial results have been excellent. A Gong Dao, in regards to his research conducted on surgical techniques in children's rheumatic diseases, has achieved profound successes. Li Chan Zui has made a device for testing pressure of the eyeball external to the eyelid, and has conducted a large amount of brilliant research in this area. Li Ti Jie wrote the book "Frostbite Casualties", and at the 1978 National Science Committee Meeting received commendation for his successes. Ren Bang Zhe, in regards to abnormal hemoglobin research theory, received the commendation of the Medical Committee at the National Science Committee Meeting in 1978. Zhou Tan Yang supported the research on membrane separation technology, and in Guang Dong Province, he test built an experimental apparatus for the permeability of highly purified liquids; he has already signed contracts with a factory to use it in production. All of the research led by Liu Xue Gao on immunity and his planning on birth vaccines has led the way, both nationally and internationally, and has been heavily emphasized in the scientific community. Li Bing Zhu wrote ((Competitive Carnivorous Animal Systems and Territorial Characteristics)) and a second essay, published in an American magazine. that has also lead the way in its field. Mou Jie Qin wrote the book ((Studies in Ancinet Chinese History)) that was published recently. Chen Yue Xu has completed work on two essays, ((Chen Zhan Sun and Zhi Er's Works Explained)) and ((Comrade Chen Tan's Biography)). The History Department compiled and edited ((Articles of Research on World History)), ((Collected Essays on Ancient Chinese Historical Research)), and ((Collected Essays on Southeast Asian Historical Research)). Huang Fu Qiu's new book ((Tracing the Source of the Works of Renouned Literary Artists of Ancient Vietnam)), which is in its final draft. Yi Zhi Ping, Yi Guang Zhou, and Huang Chao Cai jointly wrote the book ((Handwritings and Journeys of Qun Shou)).

The Chinese Literature Department published ((Selections of Historical Chinese Classical Musical Poetry)), ((Collected Essays on Chinese Literature Research)), and ((A Reference Text on the Literature of Ao Men and Tai Wan)). The Journalism Department has written the book ((Histroical Pieces of Hua Nan Journalism)) (first volume). The Economics Research Institute jointly compiled and edited ((Studies in Government Economics)) (the Socialism Section has already completed the first draft).

Regularly published periodicals include: ((Ji Nan University School Paper)) (published by the Philosophy, Socialism, and Natural Science Sections), the ((Ji Nan University Monthly)), the ((World Literature Ouarterly)), the ((Southeast Asian Research Materials)), ((Reference Materials on Economic Research)), ((Research Materials on Commodities)), and ((Scientific Vanguard)) publications, as well as other internally produced reference materials.

The university library currently has a collection of over 790,000 books. Among them are 90,000 foreign texts. There are current subscriptions to 3,200 types of periodicals. Additionally, the Southeast Asian Research Institute has a collection of 16,000 books, and has current subscriptions to 144 types of periodicals.

77

ANALAN ANALANA COUNTRY I WAS ANALAN

University affilliated units include: a printing house, a machine factory, an experimental farm, and the school also has affilliation with an elementary school, a kindergarden, and a medical section.

The school occupies an area of 1,120 mu. School constructed facilities occupy a surface area of over 140,000 square meters. Currently, a larger library is under construction, and it is nearly operational.

Since the restoration of Ji Nan University, it has received the support and praise of the overseas Chinese, the comrades from Ao Men, and other concerned international parties. In recent years, people have come to the school to participate in research, visit, or lecture on an ever-increasing basis. The school has sent students abroad, and to Ao Men, for advanced studies, investigations, and participation in technological conferences, as well as other acitvities, on a gradually increasing basis.

### Commencement Date: June 14th

Current School Administrator and Party Secretary: Yang Kang Hua

1

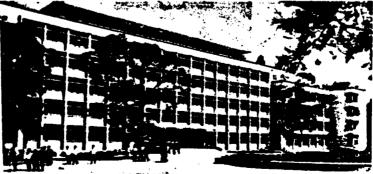


Hua Nan Industrial Institute

Campus Address: Shi Bei, Guang Zhou City, Guang Dong Province

The Hua Nan Industrial Institute was founded in October of 1952 through a merger of the related specialties and departments of the original Zhong Shan Industrial Institute, the Industrial Institute of Ling Nan University, the Allied Industrial Institute of Hua Nan University, the Guang Dong Industrial Vocational College, and also, from schools such as Nan Chong University, Hu Nan University, Guang Xi University, the Wu Han Exchange Institute, and the Wu Chang Chinese University. On November 17th of the same year, a school opening ceremony took place, and this day became the Hua Nan Industrial Insititute's Commemoration Anniversary date.

When the Hua Nan Industrial Institute was established, six departments in mechanical engineering, electric motor engineering, civil engineering, water conservancy engineering, and chemical engineering were set up. There were 15 specialties and, additionally, there were four vocational classes. In September of 1953, the related departments and specialties of Wu Han University, Hu Nan University, and Nan Chang University, as well as the Jiang Xi Ceramics Vocational Institute merged with this school. Resultingly, the Hua Nan Institute had compiled all of the teaching materials and equipment of 11 schools or institutes in five of China's southern provinces, as well as a large number of teachers, specialties, and management personnel.



The teaching building at Hua Nan Industrial Institute. The Hua Nan Industrial Institute has adhered to the educational principles of the party, and has constantly grown and expanded. In 1960, it was praised as a leading institution of higher learning in our country.

Hua Nan Industrial Institute has empahsized the establishment of an excellent style of study, and this has traditionally been a difficult struggle of braving each experience encountered, being brave enough to establish a new spirit, with a conscientious and careful, steady and sure style of study, and, in our civilization, being both frugal and thrifty.

Since the establishment of the Hua Nan Industrial Institute, it has produced over 28,000 graduates for our country, many of whom form the core of leadership in technological units throughout the nation. At the 1960 National Conference of Outstanding Workers, and at the 1978 National Science Committee Meeting, Hua Nan Industrial Institute graduates received commendations. Among them, there were a few people who were relatively young. For example, the Vice President of the Nan Jing Chemical Engineering Public Chemical Engineering Machinery Plant, who is also an assistant engineering instructor and a 1964 graduate, Fang Chang Ju, received commendation at the 1976 National Science Committee Meeting, and at the meeting was designated as a National Exemplary Worker.

Hua Nan Industrial Institute is situated on the shore of the South China Sea, and has a tropical and subtropical climate. Based on its geographical location, the special characteristics of the climate, and the established requirements of the socialist enterprise, this school, at the time of its establishment, organized departments in rubber, sugar refining, paper milling, and the associated specialties. In 1959, it added a shipbuilding department. As it produces talented men and women, it also very actively develops and improves these specialties in all aspects of their respective technologies, as well as developing the relevant foundational research theories. Furthermore, research in the areas of subtropical construction, ship engineering, vessel motive force, shipboard engineering, and marine accoustics engineering, both in theory and application, has had a great deal of success. It has created economical development for the subtropical areas of our country, as well as a foundational base of personnel qualified in the scientific and research areas of subtropical construction, subtropical economics, and marine enterprises.

The Hua Nan Industrial Institute is constantly establishing new specialties and endeavoring to develop, on an active basis, the many new rising sciences. In 1958, this school established the new Department of Mathematics and Mechanics, and a physics department, beginning the unification of the development of science and industry. In 1956, after the school's electric motor and generator engineering department moved back here from the Cheng Du Telecommunications Institute, it did, in 1958, restore the Department of Wireless Radio Engineering, and in 1960, the Department of Automation was added. After these departments and specialties were added, active research and exploration in the development of these new sciences continued. In electronics and electronic computers, there have been many gratifying successes. In 1958, the Department of Wireless Radio Engineering's teachers and students researched and test manufactured an analog computer, and as a result, they became the first unit in our country to produce a successful computer of this sort. In recent years, these departments have had 33 research articles produced that have received commendations. At the 1978 National Science Committee Meeting, the research units received the designation as the leading research units of the nation.

The Hua Nan Industrial Institute constantly revises its teaching methods and course contents, actively carrying out the production of better teaching materials. The school has read and edited over 135 teaching and exchange articles and reference texts from institutions of higher learning throughout the ocuntry. Among them, 56 were published under this school's supervision, and 33 were simply edited.

The Hua Nan Industrial Institute presently has three research denters established for wireless radio automation and control, resource materials, and chemical engineering. There is a Construction Design Research Institute, and 11 independent research centers for subtropical construction, structural engineering and construction, carbohydrates, superfined starches, natural solutions electromagnetic control, hydraulic transmissions, metal cutting theory, mechanical engineering, internal combustion engines, electrification sciences,

and chemical engineering high pressure containers. These research centers shoulder the burden of responsibility for carrying out major research projects for the nation and Guang Dong Province.

A portion of the teachers of this school are engaged in teaching, and a protion of the teachers are engaged in scientific research work. In 1964, there were 17 research articles that were nominated to receive national science commendations. Among them, were the type 691 coagulants, silicates, and molybdenum research articles, which were conferred the National Science Committee awards. At the 1978 National Science Committee meeting, there were 16 articles presented that had achieved successful results; the Wireless Radio Department and the Heavy Chemical Engineering Department's research works. such as nuclear synthesis of amino peptides, earned them the designation as outstanding research units. Ma Qie Jin and Yan g Jia Zhi were cited as outstanding researchers. After the National Science Committee meeting, there were a total of 98 successful research articles that received commendations from Guang Dong Province. Among them, the triangular piston rotary type gas driven engine research article was cited as one of the most successful. It is in the midst of evaluation by the relevant committees of the State Council, as requested by the school.

The school has a staff of 340 research personnel. Among them are 111 assistant professors and lecturers. The school produces for publication, on a regular basis, the ((Hua Nan Industrial Institute School Paper)), a quarterly journal that is for national distribution.

The Hua Nan Industrial Institute has expanded from the original six departments and 15 specialties to its current 12 departments and 42 specialties.

#### DEPARTMENT OF MACHINERY ENGINEERING

Machine Manufacturing,Craftsmanship, Facilities, and Automation Specialty Casting and Founding Specialty Forging Specialty Welding Specialty Metallurgical Sciences and Thermal Treatment Specialty Automotive Specialty

DEPARTMENT OF ELECTRIC POWER

Electric Motor and Generator Specialty Electric Power Systems and Automation Specialty

Industrial Automation Specialty

### DEPARTMENT OF CHEMICAL ENGINEERING MACHINERY

Chemical Engineering Machinery Specialty Macromolecular Materials Processing Machinery Specialty

Light Industries Machinery Specialty

Chemical Engineering Automation and Instrumentation Specialty

Corrosion and Protection Specialty

# DEPARTMENT OF HEAVY INDUSTRIES CHEMICAL ENGINEERING Rubber Products Manufacturing Specialty Macromolecular Chemical Engineering Specialty Basic Organic Chemistry Specialty Inorganic Chemistry Specialty Gelatinous Materials Specialty Inorganic Non-metals Materials Specialty

### DEPARTMENT OF LIGHT INDUSTRIES

Paper Milling and Manufacturing Specialty Sugar Refining Specialty Chemical Fibers Specialty Microbiological Engineering Specialty

DEPARTMENT OF MATHEMATICS AND MECHANICS Applied Mathematics Specialty Applied Mechanics Specialty

### DEPARTMENT OF PHYSICS

Applied Physics Specialty

Semiconductor Physics and Electronic Devices Specialty

## DEPARTMENT OF CHEMISTRY Chemical Engineering Specialty Chemistry Specialty

The above mentioned specialties have four year programs of study. In 1980, there were 7,100 undergraduate students attending the school. There were 27 specialties that enroll research students. Currently, there are 133 research students enrolled in the school. Presently, the entire school system has a staff of 4,771 personnel. Among them are 1928 teachers. Among the teachers, there are 46 professors, 91 assistant professors, 1,057 lecturers, 108 teacher's aides, and 626 assistant teachers. Some of the staff are very well known, such as Luo Ming Han, Meng Xiong Cai, Yu Chong Zhai, Zhou Xia, Li Na Hua, Zhang Guang, Wang Ji He, Zhang Li Tian, Yu Xue Jian, You Chuang Zhong, Ju Gong Jiu, Yang Jia Zhi, Yan Wen De, Wang Pen Chong, Mou Fu Ju, Chen Shu Gong, Cha Dun Xian, and Ken Chan Qun. There are also many well known young and middle aged teachers who are on the rise. They are in the midst of producing fine undergraduate students for our country, as well as producing research students and research work, and, just as well, written texts. In 1980, Assistant School Administrator Qun Jin Shi authored an electronics guide that has made significant contributions towards the development of Hua Nan Industrial Institute.

The teaching equipment and facilities for the school are quite numerous. In the initial establishment of the school, there were 16 laboratories, and now, there are nearly 100 laboratories equipped with over 24,000 different types of instruments. There is also a machine facotry, a radio factory, a chemical machinery plant, a rubber plant, and four school managed factories. Currently, the school is in the midst of establishing a precision automotive processing center. These laboratories and school managed factories are established as a base for the training of the entire school's student body, for scientific research, and for the manufacture of new products.

The school library currently has a collection of over 750,000 books. Among them are 180,000 foreign texts. There are 2,600 different types of periodicals, and among them are 1,800 foreign periodiclas. There is also an education section set up at this school's

Foreign Teaching Materials Center library. This school is a frontrunner in the use of modern teaching materials, and has already established a moderately scaled electro-chemistry teaching center, completely furnished with color video recording equipment and recording facilities, specilaized electro-chemical classrooms, and language laboratories. It is presently in the midst of strengthening and expanding its teaching facilities even more.

In recent years, the Hua Nan Industrial Institute has taken various types of steps to strengthen the quality of the teaching staff in their job of producing graduates, such as encouraging teachers and research students to pursue doctorate degrees. At the same time, it endeavors to strengthen the exchange of technology with countries abroad by inviting authors and specialists from Ao Hen and elsewhere to come to the school for tours. Moreover, the school has sent teachers to participate in international technology conferences and present essays. Since 1978, the school has sent a large number of exchange students and advanced studies students to over 10 countries to study or do short-term research and investigations. The school has also invited a few well known foreign authors and instructors to assume positions as teachers.

The school is adjacent to Ao Men, and in recent years, has maintained an exchange program for the teachers and students of both countries, conducting an extensive exchange of scientific technology and academic theory work.

The Hua Nan Industrial Institute occupies an area of 2,580 mu. Currently, school constructed facilities occupy a surface area of over 300,000 square meters. Furthermore, there is a printing house, a health care clinic, a child care center, a kindergarden, stores, and various other affiliated installations.

Since the establishment of the Hua Nan Industrial Institute, it has gone through two separations and unifications. In 1958, the institution's Department of Chemical Engineering and Department of Paper Manufacturing separated, and additionally, the Hua Nan Chemical Engineering Institute was founded. In 1962, in the summer, the two departments again merged. During the Decade of Turmoil, the growing Hua Nan Chemical Engineering Institute was completely destroyed, and

student enrollment stopped for a period of over four years. In 1970, the school name was changed, and the school was split into the Guang Dong Industrial Institute and the Guang Dong Chemical Engineering Institute. It remained as such until the "Gang of Four" was crushed. In August of 1978, the two schools were again merged, and they began work in the endeavors of everlasting socialism's Modernization Plan. Hua Nan Agricultural Institute

Campus Address: Shi Bei, Guang Chou City, Guang Dong Province

The Hua Nan Agricultural Institute is a school with a relatively long history, specialized facilities, and a fairly complete selection of scientific specialty courses. Moreover, it has the special characteristics of a university of the tropical and subtropical region. It is an integrated school of the sciences, under the administrative control of the Ministry of Agricultural Industries.

The Hua Nan Agricultural Institute was officially established on November 10th of 1952. At that time, a re-organization of all of the institutions of higher learning was being conducted throughout the entire country. The original Zhong Shan University Agricultural Institute, Ling Nan University Agricultural Institute, and the Animal Husbandry and Veterinary Sciences Department (a portion of it) of the Guang Xi University merged to create Hua Nan Agricultural Institute. The precursory organization of the original Zhon - Shan University was the privately established Guang Dong Agricultural Vocational College, founded in 1917. In 1924, its name was changed to the Guang Dong University Agricultural Institute. In 1931, it was changed to become the Zhong Shan University Agricultural Institute. The precursory organization of the original Ling Nan Universit" Agricultural Institute was the Agricultural Sciences Department of Ling Nan University, founded in 1916. In 1921, it was changed to become the Ling Nan Agrucultural Sciences University, and in 1927, it was designated as the Ling Nan University Agricultural Institute.

After the establishment of the Hua Nan Agricultural Institute, Chairman Mao Ze Dong, on November 28th of 1952, inscribed the school's name in his our calligraphy. In 1958, the Hua Nan Agricultural Institute separated to provide support to the eight areas of Guang Dong Province, where it organized and established branch schools. The Forestry Department separated from the school and set up the Guang Dong Forestry Institute, until 1962, when a portion of the separated schools stopped operations, and the Forestry Institute

moved back to the Hua Nan Agricultural Institute. In 1964, the Department of Forestry again separated from the school and merged with the Hunan Ag. Institute, and changed the name to Zhong Nan Forestry Institute. In 1970, the two institutes merged to adopted the name Guang Dong Agriculture and Forestry Institute. It remained this wav until 1974, when the original Hu Nan Forestry Institute separated and returned to Hunan. The Institute restored the original designation of "Hua Nan Agricultural Institute".

During the War of Resistance against Japan, Zhong Shan University Ag. Institute established 6 departments. In 1952, after the institutional re-organization, it added 8 more departments, ag., forestry, animal husbandry and veterinary sciences, agricultural industry machinery, plant protection, horticulture, soil agri-chemistry, and silk worms. as well as a correspondence section. Over the years, it has established more and more specialties, and presently has over 30 such specilaties established. The precursory organizations of Zhong Shan University Agricultural Institute and Ling Nan University Agricultural Institute had a total of 1,939 undergraduate students. Among them, many later became well known authors, scholars, or specialists in the field of agriculture. The current Insititue Administrator of Hua Nan Agricultural Institute is Yue Xi Huan. The current Assistant Administrator of Zhong Shan University is Bo Zhe Shi. Both of these people saw the stages of progression as it happened at the Zhong Shan University Agricultural Institute, while they were attending the school themselves. In 1952, after the national departmental re-organizations, and in the 28 years since, a total of 12,111 undergraduate students have been produced; there have been 58 research students graduated, 192 foreign exchange students, and 250 correspondence course students have graduated. In recent years, the Institute has assumed the mission and responsibility for the training of each type and level of talented agricultural management personnel and science teachers.

The Hua Nan Agricultural Institute is situated on the delta of the Pearl River. In teaching and scientific research work, it has reflected the distinctive characteristics of the natural tropical and subtropical regions of the Hua Nan area, uniting agricultural indus-

trial production with reality. Early in 1920, at the time of the Guang Dong University Agricultural Institute. a lecturing institute on silkworm scineces was established in Xin Xuan County of Guang Dong Province. In 1927, the Zhong Shan University Agricultural Institute also established a silkworm improvement agency in Qing Yuan County of Guang Dong Province. The agency produced trained personnel in the field of silkworm technology, and resultingly, caused improved production of various types of silkworms. In the early years of Ling Nan University Agricultural Institute. it introduced superior varieties of bamboo, fruit trees, vegetables, sugar cane, and poultry from abroad. Among them, from the brothers of Xia Wei, the superior species of Chinese Flowering Quince was introduced, and it became known as the "Ling Nan papaya"plant. From India. a variety of milk producing cow was introduced that generated a wide range of genetic experiments, which were the earliest known milk cow genetic experiments conducted in Guang Dong Province. In 1927, the Zhong Shan University Agricultural Institute established the "Nan Road Rice Seed Genetics Farm" in western Guang Dong Province, and, as well, thereafter established four other experimental rice farms for the study of rice seed genetics, organism habits and relationship to the ecosystem, categorization and classification, and wild rice production. as well as developing other aspects of research. During the War of Resistance, over 40 varieties of hybrid seeds were engineered, which increased production efficiency from between 5 and 25%. Because of the Soil Investigation Institute, supported by the soil specialtst Deng Zhi Yi, the improvement of soil for the main arteries of exchange throughout the entire province of Guang Dong, in earlier times, and for the soil distribution studies of some 30-odd counties, the theories for improving soil quality, and their investigative research, as well as similar accomplishments for the Chang Jiang River and the Yellow River basins, and for other province's soil improvement investigation studies, excellent results were obtained that significantly improved the quality of the soil of these areas. Due to the Agricultural and Forestry Research Institute, supported by the botanical classification specialist Chen Huan Bo, over 10.000 botanical specimens have been collected and classified. Moreover, it has provided extensive information to research units

throughout the entire country, becoming the center for botanical classification for the whole nation. These types of work for the Hua Nan Botanical Research Center, after liberation, have created a superior base of study. These organizations have, for Guang Dong Province and the Hua Nan agricultural industries sciences, and for production as well, presented outstanding examples of development work in their endeavors.

وأجرارها والمحارجة والمحارجة والمحار بالمحاج فرار

After the liberation, there were large developments in the area of research, for the core of personnel, the organization, the facilities and equipment, and the experimental farms. In the last 28 years, especially in the systems of cultivation for tropical and subtropical regions, the ecosystem, soil and production sources, high yield crop production, high yield fruit tree produce production, genetic seeding and hybridization of plants, plant growth theory, cellular growth and division, plant diseases, insect pestilence theory, insect extermination and control, and natural enemy utilization, as well as southern region rice paddy mechanization farming, poultry nourishment, animal raising, and prevention and treatment of diseases, in animal husbandry pharmaceutics, Chinese agricultural history, agricultural biophysics theory, and other agricultural sciences' basic theories and applications of technology, there has been extensive research conducted. Over 100 successful major research articles have been produced. Published materials that have been distributed include ((Chinese Rice Paddy Cultivation Studies)), ((Chemical Protection of Plants)), and the ((Botanical Annals of China)), in the 63-30 designated file of scientific specialist's reading materials. Over 1,646 essays have been compiled (in book form). At the National Science Committee meeting, the following articles received commendations: "The Origins and Evolution of Chinese Rice Paddy Cultivation and Planting", "Anti-fungal Eradication Methodology Utilizing Indigenous Technology for Increasing Production of Cellar Mushrooms", "Biological

Control of Insects", "Treatment of Airborne Infectious Diseases in Hogs", "Insect Larva Hormonal Applications to Increase Silk Production", and "Integrative Control Methodology for Rice Sheath Blight", as well as several other articles. Professor Jiang Ying, the agri-

chemistry department, and the Soil Quality Improvement Agency also received praise. In the past two years, successful research articles include insect limitations in regards to high yield agriculture, integrative control of rice sheath blight, and classification of insects harmful to crops. They have all received the Agricultural Technology Award of the Ministry of Agricultural Industry; tomato preservation and the new "red cotton" product received two awards, and additionally, there were over 50 articles that received the commendation of the Guang Dong Province Technology Committee.

\_\_\_\_\_

In aspects of Chinese rice paddy cultivation origins and evolution, imported bamboo and peach growing technology, and cypress vine plant categorizations, the Hua Nan Agricultural Institute has had a significant international impact. Studies in insect extermination theory, natural enemies of rice paddy insects, fruit products preservation and production, insect control in agriculture, plant diseases, Chinese Parasol tree classification, animal husbandry acupuncture anesthesia, animal husbandry pharmacology, processing of products derived from animal breasts, animal microbiology, raising poultry and poultry nourishment, analysis of wood materials, silkworm genetics, forestry protection, etc., have all reached advanced levels of technology within the country. In addition to this, in recent years, in aspects of domestic animal tumors and insects harmful to farm animals. significant achievements have been made. Last year, the whole school participated in the National Agricultural Sciences Universities Instructional Writing Materials Convention, submitting a total of 114 articles, of which 29 were edited by school personnel acting as chief or assistant editors.

The Hua Nan Agricultural Institute has a relatively strong teaching staff. Scholars of the older generation, such as Ding Ying, Deng Zhi Yi, Chen Huan Bo, Shi Fan Fei, Zhang Ju Bo, Hou Guo, and Li Yan assumed positions as teachers early in the history of the school, establishing a good foundational base for teaching with comparatively stable personnel. In 1940, after Ding Ying assumed the position of Institute Administrator, many well known professors and specialists of that time came in succession to this school to assume positions as teachers. After the establishment of the Hua Nan Agricultural Institute, the school, on the one hand, was expanding its

base of talented men and women, and, on the other hand, was selecting brilliant graduates as exchange students. or as research students for advanced studies abroad. The new teachers set up a liason for apprentice teachers in training on the path to completion of their studies. Recently, a fairly complete corps of scientific research personnel has been established, and it includes a number of older generation specialists who serve as the leadership element. The previous administrator of the institute, that is, the Hua Nan Agricultural Institute Administrator Professor Ding Ying, has, in aspects of Chinese rice paddy cultivation origins and evolution, rice paddy ecosystems, rice seedling classification, and Chinese rice paddy production areas and planning distribution. made significant contributions. The present institute administrator, Zhao Jing Huan, in regards to insect studies and research, has made significant contributions also. Asssistant Institute Administrator Li Shi Wen has made great contributions in regards to fruit tree production and fruit products preservation and processing. Professor Jiang Ying, in regards to research in botanical classification, has made many great contributions. The Director of the library, Ran Jia Mian, has made great contributions in regards to research on the history of Chinese agricultural technology.

and a second and a second and a second and a second a se

The Hua Nan Agricultural Institute has a style of study that has endured in the bitter struggle, and is industrious and diligent. Former administrator Ding Ying, in the early part of the school's history, promoted the spirit of "ants gnawing at a bone", and he, for a long time, under extremely difficult conditions, was a mainstay for the well known record of events that occurred. He had a very definite and profound influence on the teachers and students. During the eight years of the War of Resistance, in spite of Zhong Shan University Agricultural Institute's move from Guang Zhou to Wei Jiang in Yun Nan, its move to Xuan Zhang in Xiang Nan, and then its move later to Wu Hua in Guang Dong, as well as the moves of Ling Nan University to Guang Zhou, Hong Kong, and Ao Bei Ping Shi's Guang Mountain, which was several hundred kilometers away, the teachers and students, under the iron willed leadership, influence, and guidance of the Chinese Communist Party's Japanese Resistance Novement to

save the nation, managed to support and conduct educational and research activities, to carry out village economic re-organizations, to advocate scientific technology, and, in the confusion of the war, discovered even greater heights of patriotism in the bitter struggle for the socialist enterprise. After the Hua Nan Agriclutural Institute was established, the teachers and students continued to advocate the simple, excellent style of study that encompasses the bitter struggle and requires excellence in studies.

During the Decade of Turmoil, the Hua Nan Agricultural Institute endured many years of turbulence, many changes of address, and even in the end was falling to pieces. However, the teachers and students, in regards to the destructive influence of the "Gang of Four", carried out an underground struggle and, under the most difficult of conditions, maintained the educational and research activities of the school, which managed to reduce the losses. In recent years, the school has adhered to the guiding principles of the party, as outlined in the course of the 11th Plenum of the Third National Committee meeting, and has carried out a re-organization. The institute appears now to have a new atmosphere of industrious and diligent perseverence emerging.

Currently, the school has eight departments with 16 specialties. The program of study is four years in length.

## DEPARTMENT OF AGRICULTURE

Agricultural Science Specialty High Yield Genetic Breeding Specialty Tea Leaf Specialty Agricultural Economics Management Specialty

DEPARTMENT OF FORESTRY Forestry Specialty

Sec. Carried

DEPARTMENT OF ANIMAL HUSBANDRY AND VETERINARY SCIENCES

627

Animal Husbandry Specialty Veterinary Science Specialty (5 year program) Poultry Raising and Poultry Disease Control Specialty DEPARTMENT OF AGRICULTURAL MACHINERY

Agricultural Mechanization Specialty Agricultural Machinery Design and Manufacture Specialty (5 year program)

in a

DEPARTMENT OF PLANT PROTECTION Agricultural Pests Specilaty Plant Diseases Specialty

DEPARTMENT OF SOIL AGRICHEMISTRY Soil Agri-chemistry Specialty

DEPARTMENT OF HORTICULTURE Fruit Tree Specialty Vegetables Specialty

DEPARTMENT OF SILKWORMS Silkworm Specialty

In 1980, there were 2,098 undergraduate students at ending classes; there were 71 research students and 100 cadre personnel in training. There was a staff of 2,023 personnel. Among them were 706 teachers. Among the teachers were 36 professors, 46 assistant professors, 340 lecturers, 88 teacher's aides, and 196 assistant teachers.

The institute currently has 10 research centers: the Agricultural Ecosystems Research Center, the Fruit and Vegetables Preservation and Production Research Center, the Tropical and Subtropical Fruit Tree Research Center the Infectious Plant Disease Research Center, the Insect Extermination Research Center, the Veterinary Sciences Pharmaceutics Research Center, the Research Center for Agricultural Genetics History, the Hua Nan Nematode Research Center, and the Biophysics Research Center. Additionally, there is the Research Agency for the Diseases of the Huang Shi Rubber Plants of Guang Dong, and the Research Section for the Study of Domesticated Birds.

The academic and technological periodicals produced and published by the school on a regular basis include the (( Hua Nan Agricultural

ATTEND AND A PARAMETA

Institute School Paper)) and the ((Guang Dong Agricultural Sciences)) periodical, which is produced for the associated agencies of Guang Dong Province's agricultural industry.

The school library currently has a collection of over 600,000 books, and among them is a collection of over 30,000 ancient Chinese agricultural texts. There are over 70,000 foreign texts, including some in English, Japanese, Russian, German, and French. There are over 120 types of periodicals, and, additionally, an "Agricultural Science and Technology Information Center" has been established.

The school has 80 conventional laboratories, and a central laboratory, equipped with 80,000 precision instruments and devices, such as electronic transmission microscopes, scanning electron microscopes, artificial meterological chambers, the source  $C^{60}$  auxillary powered precision instrument, etc. In recent years, there has been the addition of closed circuit television teaching systems and a language research center.

Auxiliary organizations of the school include an experimental farm, an agricultural machinery plant, a printing house, a health care clinic, and a kindergarden. The experimental farm operates on an area occupying over 5,200 mu, which include experimental lands for agriculture, forestry, animals, orchards, vegetables, silkworms, tea leaves, botanical nursuries, etc. Furthermore, there is a high level of mechanization evident on the farm.

The school campus occupies an area of 7,000 mu. Presently, constructed facilities on campus occupy a surface area of over 110,000 square meters. The scenery at the school is beautiful, and it has the distinctive characteristics and sights of the tropical and subtropical region.

XXXXXXX

Commencement Date: November 10 Current University Administrator: Shan Huan Party Secretary: Luo Weuhong

Zhong Shan Medical Institute Campus Address:

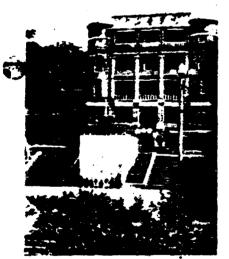
: Zhong Shan 2 Road, Guang Zhou City, Guang Dong Province

The Zhong Shan Medical Institute was created in 1953 from the merger of the original Zhong Shan University Medical Institute with the Ling Nan University Medical Institute and the Guang Hua Medical Institute. When he was young, Sun Yat Sen studied medicine at the Second Auxillary Hospital of this university (originally the Bo Ji University), and was engaged in revolutionary activities. In order to commemorate this leader of the People's Democracy, after obtaining approval of the Ministry of Health, the name of the school was changed to Zhong Shan Medical Institute, and it is currently under the administrative control of the Ministry of Health.

The precursory organization to the original Zhong Shan Medical Institute was the privately established Guang Dong Medical Specialist's College, which was founded in the year 1910. The school's address was on North Bai Zi Road in Guang Zhou City. In 1925, the privately established Guang Dong Medical Specialist's College integrated with Guang Dong University, and the name was changed to Guang Dong University Medical Institute. In 1926, the Guang Dong University changed its name to Zhong Shan University, and the Medical Institute followed suit and changed its name to Zhong Shan Medical Institute. In October of 1938, when Guang Zhou was enemy occupied territory, the school moved to various locations, over several thousand kilometers distance, such as Wei Jing in Yun Nan, Luo Ding in Guang Dong, Yue Chang and Hai Counties, all in order to maintain its classes. After victory in the War of Resistance Against Japan, the school, in August of 1945, returned to its original location and restored its classes.

The program of study at that time was six years in length, and was divided into two sections, academic and clinical. The academics section had five research organizations established. They were in dissection, physiology, pathology, bacteriology, and pharmacelogy. Each was engaged in the task of teaching and conducting research. The clinical section was separated into the Department of Internal Medicine (including contagious diseases pathogeny), Surgery (including orthopedic surgery and urological surgery), Gynecology and Obstetrics, Pediatrics, Optometry, Otolaryngology, Dermatology and Venereal Diseases, Experimental Diagnosis, and Prognostics. Each Department was a part of the hospitals that were attached to the university. Also, each hospital had a school to teach the professions of advanced nursing and midwife specialist.

After Guang Zhou was liberated in October of 1949, the school remained under the control of the People's Government. In August of 1951, the Medical Institute broke away from Zhong Shan University and became an independent medical institution, under the joint administrative control of the Ministry of Health and the Ministry of Education.



The teaching building of Zhong Shan Medical Institute.

In 1953, administrative control returned to the Ministry of Health. In August of the same year, the institute merged with Ling Nan University Medical Institute and became the Hua Nan Medical Institute. In September of 1956, the name was changed to the Guang Zhou Medical Institute, and in 1957, it was designated as the Zhong Shan Medical Institute.

The precursory organization to the original Ling Nan University Medical Institute was the Bo Ji Medical Bureau of 1865, and two years later, the Nan Hua Medical College was founded. The Bo Ji Medical Bureau and the Nan Hua Medical College both occupy a very prominent position in the history of development of western medicine in our country. In 1885, Mr. Sun Yat Sen studied medicine at the Bo Ji Medical Institute, and furthermore, began his revolutionary activities. In 1931, the Bo Ji Medical Institute became the Ling Nan University Medical Institute Auxiliary Hospital. In order to commemorate Mr. Sun Yat Sen at this medical institute, in 1935, the Ling Nan University Medical Institute was designated as the Ling Nan University Dr. Sun Yat Sen Commemorative Immortal Excellence Institute of Medicine. In 1936, the Ling Nan University Dr. Sun Yat Sen Commemorative Immortal Excellence Institute merged with Xia Ge Medical Institute and created the Ling Nan University Medical Institute. During the time of the War of Resistance Against Japan, this school moved to the areas of Hong Kong and Qu Jiang in Guang Dong from 1938 to 1946, so classes could continue. After victory in the War of Resistance Against Japan, the school restored itself in Guang Zhou City, at Chang Ti Jiu. After the liberation, it was still designated as the Ling Nan University Medical Institute. The program of study was six years. Additionally, a Nursing School was established.

The original Guang Hua Medical Institute was established in 1908. It was a privately established medical institute, attached to the Guang Hua Hospital. In August of 1954, it merged with Hua Nan Medical Institute.

Since the Zhong Shan University's mergers and re-organizations, it has developed quite rapidly. Until 1966, the school campus had expanded to over 300 mu, and constructed facility surface area had grown to over 160,000 square meters. The teaching staff had grown to have 465 personnel, and the student population had grown to 2,594. A total of 4,496 graduates had been produced for the country.

The institute has gradually established a corps of highly qualified teachers as a foundation for its sciences. The well known pathologists Liang Bo Qiang and Tai Guang Yu, the parisitologist Chen Xin Ji, the medical radiologist Xie Shi Guang, the internal medicine digestive system specialist Chen Guo Zhi, optometrists Chen Yao Zhen and Mao Wen Shu, pediatrician Chong Shi Fan, physiologist Lin Shu Mo, microbiologist Bai Shi En, and other professors have, for a long time, been engaged as teachers at the institute. Their spirit

of a serious and realistic approach to studies has established an excellent example for the students to emulate.

Outstanding results have also been obtained in regards to scientific research work. Professor Liang Bo Qiang has actively opened up research in post-mortem examinations. He has, from autopsies, designed a method of organization for the complete nasopharyngeal system, and has promoted the classification of nasopharyngeal carcinogens and their clinical, distinctive relationships. His major written works include: "Nasopharyngeal Carcinogens, Their Organization and Classification, Biological Characteristics, and Systematic Research on Their Occurrence", "Morphology and Pathogeny of the Provenience of Cancer of the Liver", and "Pathogenic Research on the Ratio of Disease Incidence in Our Nation". Additionally, he has been the chief editor for ((Compiled Essays on Pathological Analysis)) and ((Various Theories of Study in Pathological Analysis)). His scientific activities have been a great contribution to the educational enterprise in our national medical institutions and the development of the pathological sciences. Professor Xie Shi Guang is the first and foremost radiologist in our country. He has, in regards to the diseases of the various systems of the human body, conpleted extensive research on X-ray diagnosis. Among his research endeavors, in regards to the manifestation of intestinal tuberculosis and longbone tuberculosis, he submitted very thorough reports on the body systems. This was done quite early in his career. In the early thirties, he received the praise and recognition of international scholars for his proposal regarding the pecularities of relocating into position dislocated innominate bone joints, and it was designated as "Xie Shi's Technique". There has been very extensive research in regards to the clinical development and early diagnosis of nasopharyngeal cancer. Since the early thirties. Professor Chen Xin Ji has conducted systematic research on lung flukes (and fluke reproduction) and, in 1940, issued forth the specialized essay on ((Yi Yue Village Fluke Reproduction)) which was the earliest known written work on the systematic research and classification of lung flukes, and it had a great impact on academic scholars both at home and abroad. Starting from

633

1951 on, he has conducted extensive research on blood infiltrating parasites, and in foundational research on leech physiology, he advocated measures to regain large areas of low-lying depressions, or marshes, from extermination of leeches in order to create land for agricultural production. His contributions to our country, in regards to control of blood infiltrating parasites, have been outstanding. Chairman Mao and Zhou En Lai both had, on many occasions received him as a personal guest. His major written works include ((Medical Parasitology)), which at the 1978 National Science Committee meeting was cited as an outstanding writing of scientific research, and recieved a commendation.

The Zhong Shan Medical Institute has established the Tumor Research Center (which has already been designated the tumor research center for the World Health Organization in Guang Zhou), the Pathology Research Section, the Parasitology Research Section, the Pharmaceutics Research Section, the Neurological Research Section, the Optometric Research Section, and the Vaccination Research Organization. There is also the Artificial Heart Research Section, the Research Center for Cancer of the Liver, the Research Center for Chinese Medicine. the Kidney Disease Research Center, the Blood Disease Research Section. the Organ Transplant Research Section, the Research Section for Diseases of the Digestive Tract, the Endocrine Research Section, the Henatitus Research Section, and the Electronic Computer Section. Currently, there is a staff of 114 researchers. At present, the research centers have shouldered the burden of responsibility for key research on national and provincial levels, and the school has generated 18 major research projects of its own.

12:21

In regards to scientific research projects, there were 23 articles of research that won commendation at the 1978 National Science Committee meeting, such as: research on the control of nasopharyngeal cancer, morphological research and investigation of parasites in the various regions of China, Fallopian tube phenol-based gelatinous occlusion sterilization techniques, venom and anti-venom research, acupuncture anesthesia control of visceral organs and principles of internal counter-reactions, human nasopharyngeal cancer's cellular

base structure on the skin and its generation, research on the causes of Cercarian disease, and research on parasites that pene-trate or attach themselves to the human skin, etc.

The Zhong Shan Hedical Institute has, in recent years, published such works as ((Diagnosis, Distinction, and Treatment of Children's Diseases)), ((Distinction and Diagnosis of Surgical Diseases)), ((Urological Surgical Techniques)), ((Pathological Studies)), ((Selected Studies of Internal Medicine Digestive Tract Diseases)), ((Handbook on Digestive Tract Experiments)), ((Characteristics of Fatal Liver Diseases)), ((Surgical Techniques in Optometry)), ((Rules of Treatment in Optometry)), ((Biochemical Tests for Diagnosis of Bacteriological Presence)), ((Clinical Tests for Life)), ((Practical Clinical Experiments)), ((Rules for Prevention and Isolation of Infectious Diseases)), ((Preventative Rules in Optometry)), ((Foundational Theories in Chinese Medicine)), ((Clinical Application of Chinese Pharmaceutics)), ((Clinical Studies in Amyotrophy)), ((Basic Knowledge in Medical Statistics)), and ((Treatment Methods in Prolonged Recovery)).

The Zhong Shan Medical Institute thoroughly stresses educating teachers and students on limiting their needs, having a serious attitude, and complying exactly to the methods prescrebed in foundational theories; training in basic knowledge and canabilities causes a gradual improvement and a better quality of teaching. In 1964, during the implementation of the 60 basic conditions in higher education institutions, the school became united with reality, promoting the establishment of a diligent and industrious, steady and sure, deeply thought out, maximum effort style of study. As the medical institute produced graduates, they had a relatively strong foundational base and a high level of professional competence. Many of them received the praise of work units, and a large number of people are already the core or mainstay of cadre in teaching, health care, and research.

Since the Zhong Shan Medical Institute re-organized itself, it has established a Department of Medical Treatment, with a specialty in Medical Treatment. The program of study was five years in length. In 1958, the program of study was changed to six years in length. In 1976, the specialties of Hygiene, Stomatology, and Pharmacology were added. In 1979, the specialty of Medical Science was established,

as was a specialty in Medical Law. The program of study is five years in length. Since the fall of 1980, the program of study has been six years in length.

In 1980, there were 1,951 undergraduate students attending the school, 103 research students and 20 foreign exchange students were also in attendance. Additionally, there is a nursing school with .058 students. There is a staff of 1,611 personnel; among them are 602 instructors. Among the instructors are 40 professors, 90 assistant professors, 200 lecturers, 13 teacher's aides, and 259 assistant teachers.

The Zhong Shan Medical Institute has five hospitals attached to it, with a total of 1,795 beds.

Zhong Shan University currently publishes on a regular basis the following magazines: (The Zhong Shan Medical Institute School Paper)), ((New Medical Sciences)), ((National Medical Surgeon's Guide)), and ((The Journal of Neurological Diseases)). The library currently has a collection of over 360,000 books, and among them, there are 8,900 foreign texts. There are over 720 types of periodicals:available.

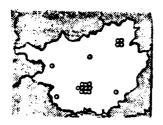
The Zhong Shan Medical Institute occupies an area of 347 mu. Campus constructed facilities occupy a surface area of over 100,000 square meters. The five attached hospitals occupy an area of over 307 mu, with a facility surface area of 130,000 square meters. The institute has established a teaching materials factory, a scientific instruments factory, an experimental farm, a zoo, and a kindergarden.

Since Zhong Shan Medical Institute's re-organization in 1953, the school had, up until 1980, produced a total of 10,623 graduates for the nation, as well as 17 foreign exchange students, 10 foreign advanced studies students, and 65 research students.

In recent years, the Zhong Shan Medical Institute has sent outstanding teachers to research organizations and institutions of higher learning abroad for studies, investigations, participation in scientific research and technology conferences, etc. At the same time, the institute has invited well known specialists to come and lecture, visit, investigate, and participate in scientific research. While conducting these types of activities, the Zhong Shan Medical

Institute has also maintained an international exchange program for scholars, and it also continues with, and improves on, its studies, treatment, and research work.

> School Commencement Date: November 12th Current School Administrator: Ke \_\_\_\_\_ (Acting) (TN: second Char. illeg.)



Guang Xi Zhuang Autonomous Region

Guang Xi University Campus Address: Nan Ning City, Xi Zhuang Autonomous Region

Guang Xi University is in the western suburbs of the regional capital city of Nan Ning in Guang Xi Zhuang Autonomous Region. It is an integrative university of science, industry, and literature, and it is under the administrative control of Guang Xi Zhuang Autonomous Region.

The Guang Xi University was built in Wu Zhou in 1928. At that time it had only preparatory courses. In June of 1929, during the struggles of the warlord Yin Yue Gui, the university ceased operations. It was restored in June of 1931. The school administrator was the famous science scholar and educator, the patriot Ma Jun Wu. In September of 1931, a science institute was established, and it began enrollment of undergraduate students. In September of the same year, it added an industrial institute and an agricultural institute. In 1935 a combined economics and botanical research section was built. Until June of 1936, the school had already developed to include the three institutes of science, industry, and agriculture. There were nine departments in mathematics, physics, chemistry, biology, civil engineering, machinery, mining and metallurgy, agriculture, and forestry, as well as a research section established at this university. There were over 80 teachers, and more than 500 undergraduate students. Among the teachers were such well known professors as the physics scholar Ma Ming Hai, the mathematics scholar Duan Zi Xie, tha machinery specialist Jin Xi Ru, etc.

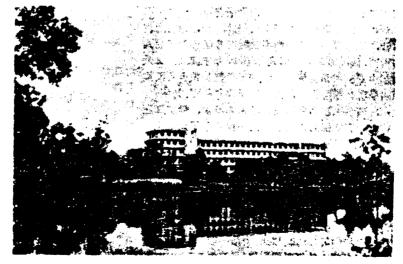
In July of 1936, the school proper was established in Nan Ning. The provincially established Vocational Teacher's College merged with Guang Xi University and entered the Institute of Literature and Law (where it established two departments in literature and socialism); the two institutes of science and industry merged and formed the Institute of Science and Industry, and the agricultural institute established itself in Wu Zhou; the provincially established medical institute changed to become the Guang Xi University Medical Institute (and shortly thereafter separated from Guang Xi University). In October of the same year, the university proper and the Institute of Literature and Law moved to Gui Lin. In 1937, the Institute of Literature and Law established the three departments of government, economics, and law, as well as two advanced studies courses in banking and local historical literature. The agricultural institute moved to Liu Zhou. In 1933, the Institute of Science and Industry moved to Gui Lin. In 1939, the provincially established Guang Xi University became the nationally established Guang Xi University. Ma Jun Wu assumed duties as School Administrator (he died of illness a year later). In 1941, the Institute of Literature and Law became the Institute of Law and Commerce.

At the stage of the War of Resistance Against Japan when both sides were stalemated, the Guang Xi University greatly expanded in size because the local universities, Ping University, Jian University, and Hu University moved south and many well known scholars of the arts, science, and educational community came to Gui Lin. It was a galaxy of talent. Well known scholars, such as Liu Shan Zhou, Zhang Tie Sheng, Sha Qian Li, Chen Wang Dao, and Qian Jia Ju were also invited to come to the school and accept positions as teachers. Students from Hua Bei, Hua Dong, and various other provinces wound up coming to the university. The university built a library, a physics building, a chemistry building, and a machinery factory. At that time, the level of Guang Xi University was on a constant rise. There was a brisk, unprecedented academic atmosphere about the school.

In 1944, Japanese Imperialism encroached upon Guang Xi. The Guang Xi University moved to Rong Jiang County in Gui Zhou Province. After victory in the War of Resistance Against Japan, the three institutes of Law and Commerce, Science and Industry, and Agriculture moved back to Liu Zhou in western Guang Xi, and half a year later, the two institutes of Law and Commerce and Science and Industry moved to Gui Lin. In 1947, the Institute of Literature was established. On the eve of liberation, the Guang Xi University had four institutes, in literature, law and commerce, science and industry, and agriculture, and there were 17 specialties. There were over 270 teachers, more than 2,300 students, and an accumulated total of over 3,000 graduates.

In November of 1949, the teachers and students of Guang Xi University welcomed in the liberation, and the school's history had another new chapter revealed. In 1950, the Teacher's College of Nan Ning entered Guang Xi University, and the university began a re-organization and revision, giving it a new appearance. In 1952, Chairman Mao Ze Dong, at the request of the teachers and students, personally inscribed with his pen the school's name of "Guang Xi University".

In 1953, an institutional re-organization was conducted, and Guang Xi University was abolished. The teachers, students, instruments, facilities, and written materials were farmed out to various other institutions. Almost all of the departments of the Institute of Literature merged into Zhong Shan University and Hua Nan Teacher's Institute. Almost all of the departments of the Institute of Law and Commerce merged with the Zhong Nan Institute of Government and Law and the Zhong Nan Finance and Trade Institute. Almost all of the science departments of the Institute of Science and Industry merged with Wu Han University and Hua Zhong Teacher's Institute. Almost all of the industry departments of the Institute of Science and Industry merged with Hua Zhong Industrial Institute, Hua Nan Industrial



A front view of the Electric Power Notors Building at Guang Xi University.

Institute, Zhong Nan Institute of Civil Engineering and Construction,

Zhong Nan Mining and Metallurgy Institute, and the Mu Han Mater Conservancy Institute. The departments of animal husbandry and veterinary science of the agricultural institute merged with the Jiang Xi Agricultural Institute. The remaining departments in literature and science were, for the most part, organized into, and formed a part of the organization of the Guang Xi Teacher's Institute. The remaining departments in agriculture and forestry were organized into the Guang Xi Agricultural Institute.

In 1958, in order to suit the needs of development and establishment of socialism in Guang Xi, under the concerned care of Presidnet Zhou En Lai, the Guang Xi University was built in Nan Ning. It took into receivership the original educational facilities of approximately 30,000 square meters of surface area, and the majority of original teachers, as well as some of the younger teachers distributed throughout the region, were transferred back to Guang Xi University. The school commenced operations in October. After its reestablishment, it gradually expanded on a larger scale, and in 1966, the number of teachers had reached 418; there were 1526 students attending the school. Six departments in mathematics, electric power and motors, civil angineering, chemistry, chemical engineering, and mining and metallergy were established, and there were a total of 13 specialties.

During the time of the Decade of Turmoil, the Guang Xi University stopped student enrollment for over five years. In 1971 student enrollment was restored. In 1972, the Department of Chinese was established, and specialties in Theoretical Writings, Information, and Literature were founded. The science and industry departments established specialties in analytical chemistry, semi-conductor devices, and chemical industries machinery. In 1973, the university was re-organized to have 10 departments in machinery, electric power, civil engineering, chemistry and chemical industries, mining and metallurgy, physica, mathematics, Chinese, philosophy, and foreign languages. Later, the university continued to establish several more specialties, and in 1979, the Guang Xi University had established 10 departments with 23 specialties.

Since the Guang Xi University re-established itself with the

three departments of literature, science, and industry, the department of industry has grown relatively larger than the others, and this is a special characteristic of the Guang Xi University. Through cooperation, the departments of science, industry, and literature have elevated the professional level of their teachers, and strengthened the foundational courses. This has promoted an active application of scientific research work, and it also provides the most beneficial conditions for the teachers to work under.

The teachers and students of Guang Xi University have had a glorious revolutionary tradition. During the time of the Warlord Gui Xi's rule, the Guang Xi University teachers and students carried out a "live in the school" movement to oppose the government policy of "military training". During the time of the War of Resistance Against Japan, the Guang Xi University, under the organized leadership and guidance of the Communist Party, developed a centralized movement to resist Japan and save the country from extermination. They united and increased their strength, striking a blow with reactionary dilligence by organizing a "reading committee", and inviting such well known local scholars as Zou Tao Fen to come to the school and lecture; in 1941. Gui Xi intensified domination over the Guang Xi University by recalling the original school administrator, the local democrat Lei Shi Heng, and sent in his place Gao Yin, who was personally chosen by Gui Xi, to assume duties of school administrator. The students began a "beat Gao Yin" movement. It forced Gao Yin to resign within a two year period. In 1945, after the Guang Xi University returned to Rong Jiang in Gui Zhou, the teachers and students privately set up an organization to review Mao Ze Dong's book ((Theory United With Government)) and convened large meetings, issued propaganda letters, set up democratic movements for government unification, and began a fierce counter-revolutionary struggle with local authorities. During the time of struggle for liberation, the teachers and students actively participated in the anti-civil war, anti-hunger, and anti-persecution movements. On March 30th of 1949, the teachers and students convened a large demonstration, surrounding the Nationalist Party Central Bank, and exposed the crimes of the Nationalists in their

exploitation of the people through use of their civil policies, and this forced the Nationalists to make some concessions. During the time of the War of Resistance Against Japan, and in the struggle for liberation, the Guang Xi University had many students migrate to the areas of liberation and participate in revolutionary activities.

The Guang Xi University has had an excellent school spirit in the bitter struggle. The teachers and students of the school, with little resources and under extremely difficult conditions. accomplished pioneering work, devoting themselves to the management of the school, which enabled the school to gradually develop. The majority of students that came to the school from the different nationalities of  $Guan_{\mathcal{I}}$ Xi led very plain and simple lives. In 1944, when the school moved to Rong Jiang County in Gui Zhou, they lived in the school, slept on the floor, had no desks, and sued wooden planks to work on, all in order to support the school. After the liberation, through the 1953 institutional re-organization, the library and the facilities and eauipment were moved out. At the time of the 1958 re-building of the school. the conditions under which classes were conducted were extremely difficult. The teachers and students used their two hands and built a socialist university by making due with whatever was available, enduring in the bitter struggle, maintaining the school in a thousand and one ways, and enabling it to gradually develop.

The Guang Xi University currently has 10 departments with 23 specialties. The undergraduate program of study is four years in length. In 1978, enrollment of research students began, with two and three-year programs of study. The departments and specialties are listed below:

## DEPARTMENT OF MACHINERY

Machine Manufacturing Craftsmanship, Equipment, and Facilities Specialty Casting and Founding Craftsmanship, Equipment, and Facilities Specialty Internal Combustion Engines Specialty

## DEPARTMENT OF ELECTRIC POWER

Power Generation and Distribution Specialty

Industrial Enterprise Electrification and Automation Specialty

----

e . 14

DEPARTMENT OF CIVIL ENGINEERING

Industrial and Civil Construction Specialty

Water Conservancy and Hydroelectric Engineering Construction

DEPARTMENT OF CHEMISTRY AND CHEMICAL ENGINEERING

> Inorganic Chemical Engineering Specialty Chemical Engineering Machinery Specialty Basic Organic Chemical Engineering Specialty Chemistry Specialty

DEPARTMENT OF MINING AND METALLURGY Mining Specialty Metallurgy Specialty

DEPARTMENT OF MATHEMATICS Mathematics Specialty Computer Mathematics Specialty

DEPARTMENT OF PHYSICS Wireless Radio Technology Specialty Physics Specialty

DEPARTMENT OF CHINESE Journalism Specialty Language and Literature Specialty

DEPARTMENT OF FOREIGN LANGUAGES English Specialty Japanese Specialty

DEPARTMENT OF PHILOSOPHY 644 Philosophy Specialty Political Economics Specialty

In 1980, there were 2,939 undergraduate students attending the school. There were 32 research students in attendance.

Currently, there is a staff of 1,489 personnel. Among them are 717 teachers. Among the teachers are 14 professors, 14 assistant professors, 286 lecturers, 134 teacher's aides, and 269 assistant teachers. In administration, there is one administrative professor, one assistant professor, and 8 lecturers. Among the teachers, there are a few who have been engaged in teaching at the school for nearly 50 years, such as Guan Jian Xuan. The majority of the teachers are graduates or research students of the fifties or early sixties, and have had more than 20 years of practical training as teachers, and all of them have a relatively high level of competence and experience. They are the present strength of this school's academics and research work.

The school occupies an area of 996 mu. Currently, constructed campus facilities occupy a surface area of over 125,000 square meters. The school campus is covered with green trees and shrubbery, and all through the four seasons, it is breathtakingly beautiful.

The school library has a collection of over 410,000 books. Among them are 110,000 foreign texts. Additionally, there are 1,282 types of periodicals available. The school publishes, through the social and natural science sections, the ((Guang Xi University School Paper)), for distribution to the comrades of the school and interested units elsewhere. It is not available for public distribution.

Aside from the school itself, there are two operational factories: the Guang Xi University Electric Notor Plant and the Physics Department's Radio Factory. There is also a printing house. Other affiliated organizations include a middle school, an elementary school, a kindergarten, and a health care clinic.

Since the establishment of Guang Xi University in 1958, and until September of 1980, there had been a total of 7,838 undergraduate students and 94 vocational students produced. They are working in each area of the front lines of the socialist struggle, and many have already formed the core of technology and work for the nation.

In aspects of scientific research work, there are at present six research sections in metal physics, lasers, hydraulic systems, computer technology and automation, water conservancy and hydroelectric power, and chemistry. In 1980, they assumed responsibility for producing a total of 36 research articles for the related ministries of the Central Committee, the autonomous region, and the school. The assistant school administrator, Professor Guan Jian Xuan, has for a long time been engaged in leading the school's research in allo phase diagrams. He has written ((Silver---Antimony---Tin Ternary Alloy Phase Diagrams)), and has written, along with several students, the ((Silver---Tin---Aluminium Ternary Alloy Phase Diagram Equivalence Charts)) essay that was printed in the ((Physics Sciences Journal)). It received international praise. At the Americal Metallurgical Science Committee meeting, in 1976, these two articles were listed on the title index. Lecturer Sun Jian Ming's design of a large, new, shore-based hydroelectric station combined with large operational dams and the Chemistry and Chemical Engineering Department's EDTA chromium and steel desulphurization plans are two articles of research that have had great success and are at relatively high levels of technology in our country. They won commendations at the 1977 National Science Committee meeting. Professor Ji Xing Zuo's research on electrical ground connections measurements methodology corrected the previously applied Soviet 5D+40 meters method that was incorrect. It was published in the Ministry of Water Conservancy's '76 handbook entitled ((Models of Electric Power Installation Technology)). Assistant professor Huang Ji Dongand lecturer A Bo Ji, in regards to research on soil distension, promoted an independent solution which was received with both praise and utilization by concerned parties. Professor Tai Si's works of Guang Xi Zhuang Autonomous Region, such as ((Records of Western Xi Xiang)) and ((Giu River)) were praised in '79 as excellent works 30 years after the national establishment. The written dramatic works ((Nodern Rhyming Poetry)) received praise and emphasis from several Americal Literature journals.

In recent years, foreign exchange of technology has developed. The school has invited Yugoslavian, American, Australian, and Canadian professors to come and assume positions as teachers. Additionally, a school liason has been established with the Yugoslavian University of PuLiQiDiNa (TN: transliterated) University. In September of 1980, Assistant Professor Wu De Xing participated in a technology conference at the Yugoslavian University. He also visited the PuLiQiDiNa and ChanLaReSui (TN: transliterated) universities. Additionally, a group of teachers has been sent to Yugoslavia, America, Japan, and Italy for advanced studies.

> Current School Administrator: \_\_\_\_Ying Ji (acting) Party Secretary: Huang Zhuan Lin



Si Chuan Province

Si Chuan University Campus Address: Wang Jiang Building, Cheng Du City, Si Chuan Province

The Si Chuan University was established in 1905. It already has over 75 years of history.

The earliest known precursory organization to the Si Chuan University was the Revered School of Confucian Classics, established and built in the city of Cheng Du in 1875. The manager of the school was Xue Shi Zhang, who was brought up in Si Chuan. He advocated the phrase "study Chinese for the body, study the west for applications". The school's curriculum, besides emphasizing the works of the hundreds of Confucian scholars, also emphasized the study of mathematics and other modern sciences. Of those students who finished the school, some became famous practioners of the new government, such as Yang Tuo and Lie Guang Di (members among the six noblemen in the Bourgeois Reform movement of 1898), and some became well known literary journalists of the time, such as Song Yu Ren, Can Ping, and Wu Zhi Ying. In the last 31 years of the school's existence, it could be said to be one of Si Chuan Province's most modern institutions of higher learning to sprout up.

During the time of the twenties, the practice of imperial examinations was given up throughout the country, and in the new wave of school management, the Revered School of Confucian Classics stopped being managed. Imitating the Jing Shi University of Bei Jing, in 1902, plans were outlined for establishment of the Si Chuan Provincial Capital Academy of Higher Learning. In 1905, the Si Chuan Provincial Teacher's Academy was founded. In the same year, the Si Chuan Academy of Law and Government, the Can Gu Academy of Si Chuan, the Si Chuan Academy of Literature, the Provincial Academy of Agriculture and Governmnet of Si Chuan, and the Si Chuan Industrial Academy were also established in succession. Students had graduated from schools in cities, districts, and counties of the province were selected for attendance. They were the earliest of the new type of students chosen

to go to institutions of higher learning (TN: as opposed to the method of imperial examinations) in the Si Chuan region, and this was also considered the embryonic stage of development for the universities of Si Chuan.

After the Bourgeoise Revolution of 1911, the various academies of higher learning in Si Chuan Province were designated as schools of higher learning. The si Chuan Provincial Teacher's Academy was designated as the Cheng Du Advanced Teacher's School. The five specialized academies each separated and became the Si Chuan privately established Vocational School of National Studies, the Si Chuan privately vately established Vocational School of Foreign Languages, the Si Chuan privately established Vocational School of Arriculture, the Si Chuan privately established Vocational School of Industry, and the Si Chuan privately established Vocational School of Law and Government. Among them, the Cheng Du Advanced Teacher's School was the most well known of the six. During the time from 1922 to 1924, the veteran of the revolutions, Wu Zhu Zhang, served as administrator of this school.



A view of the teaching building of Si Chuan University.

In 1926, the advanced schools of Si Chuan Province became the nationally established Cheng Du University. It established the three institutes of literature, science, and law. There were 11 departments. During this year, the Cheng Du Advanced Teacher's School developed to become the nationally established Cheng Du Teacher's University, which established three institutions in literature, Science, and education, with 11 departments and two advanced courses in art and physical education. The five vocational schools followed the same course and merged with the privately established Si Chuan University, which established five institutions in law and government, Chinese literature, foreign literature, agriculture, and industry, with 19 departments.

In 1931, these three schools again merged to create the nationally established Si Chuan University. Because of this merger, the privately established Industrial Institute of Si Chuan University was taken and merged with the provincially established Chong Oing University; the agricultural institute was independently established as the Si Chuan provincially established Agricultural Institute. From the aftermath of these mergers, there were only the three institutes of literature, science, and law that remained. There were 11 specialties in Chinese, history, English, education, mathematics, chysics, chemistry, biology, law, government, and economics, as well as two advanced courses in art and physical education. In the very beginning, the school had several addresses. In 1936, the school began to assemble in one location. During the time of the War of Resistance Against Japan, in 1939, classes were still held in the foothills of the 2 Lin Mountains. In 1943, the school moved back to the capital city.

On the eve of liberation in 1949, the Si Chuan University had established a total of six institutes in literature, science, law, teaching, industry, and agriculture. There were 25 departments in Chinese, foreign languages, history, arithmetic, physics, chemistry, biology, geography, law, government, economics, education, navigational engineering, civil engineering and water conservancy, electric motors and generators engineering, chemical engineering, mechanical engineering, agricultural arts, forestry sciences, horticulture, botannical pestilence diseases, silkworm studies, agricultural economics, agri-chemistry, and animal husbandry and veterinary sciences. There were also two research institutes for literary sciences and chemistry. There were 5,017 students attending the school. There were a total of 371 teachers, and among them were 119 professors and 25 assistant professors.

After the liberation, and after going through the institutional re-organizations, the Cheng Du Institute of Science, the Hing Lan

Academy, the Da Zhou Institute, the Xi Nan Institute, as well as Hua Xi University, Cheng Hua University, Chong Ging University, Zhou Bei University, and Yun Nan University's separate institutes were merged. In 1952, the five departments of the agricultural institute, the teaching institute, and the Institute of Law were moved out, and each separated and entered the Xi Nan Teacher's Institute, the Si Chuan Teacher's Institute, the Xi Nan Institute of Government and Law, and the Xi Nan Agricultural Institute. The departments of geography and navigational engineering separated from the school and merged with Chong Ging University, Nan Jing University, and the Bei Jing Navigational Institute. In 1954, and in 1956, the independently established institutes in agriculture and industry were re-established as the Cheng Du Industrial Institute (now the Cheng Du University of Technological Sciences) and the Si Chuan Agricultural Institute. It was in this manner that the Si Chuan University built an integrated university of literature and science. In 1959, in order to suit the needs of scientific development, the new departments of philosophy, wireless radios, and atomic energy were established. Just before 1980, there were over 5,000 students in attendance at the university.

During the time of the Decade of Turmoil, the school was completely destroyed. Student enrollment stopped for a period of over four years.

After smashing the "Gang of Four", the school underwent very rapid restoration and development.

The Si chuan University is an institution with a long and gloricus revolutionary tradition. Fou De Ceng was a student of the provincial Teacher's School. He secretly read the ((People's Paper)) of the Reading Alliance Society, and was greatly influenced by it. During the time of the Bourgeois Revolution of 1911, there were many beople of Si Chuan University who promoted the struggle of Qing Mang Chao, each making their own individual contributions. During the "May 4th" epoch, the Cheng Du Advanced Teacher's College was a center for student movement activities. Before 1922, the Cheng Du Advanced Teacher's College had already organized a Chinese Socialist's Yinth Organization. Under the concerned care of school administrators Wu Zhu Zhang and Yang Jian Gong, the Si Chuan University was organized

as a part of the Chinese Communist Party in the twenties. Sevolutionary leaders Jun Dai Ying and Mang Shi Nu both assumed resitions as teachers in the school, actively propagating Marxist Theory, inspiring and enlightening the students exploration and truth seeking activities in the revolution. During the late thirties, the Si Chuan University had already established a Party Headquarters. Furthermore, the students in Si Chuan were the first to respond in the "December 9th" movement, forming the front lines in the People's battle in the War of Resistance Against the Japanese. In the forties, for the Carty's organization, and against the Nationalist's dispatched or anizations, a mass demonstration was held. It achieved relatively rood success. Before the liberation, the revolutionary activities and movements of the students of Si Chuan University continued constantly. For example, the "February 16th" massacre in the 1928 Si Chuan Warlord's struggle, the "rice field massacre" in 1938 anti-nationalist government persecutions, and the anti-Nationalist Government Party educational teachings, the academic freedom movement, the ((teacher's incident)) in the anti-Nationalist Government student suppression of the forties, the anti-persecution demonstrations for the progressive professors such as Ji Da Bo, Li Xiang Jie, Ken Tian Xian, etc., in the ((three professors incident)), the "June 2nd" anti-hunger movement, and the anti-civil war and anti-persecution movements, until the 1948 anti-fake provincial chairman Wang Lu Ji movement that was held, etc. In the struggle for these various movements, a great number of outstanding revolutionary fighters were discovered. During the time of the great revolution, and until the evel of liberation, some twenty-odd professors, such an Yi Shi Shao, Li Zheng En, Xian Lao Yang, Jiang Fu Zhu (Miss Jiang), Yang Po Dan, Xu Chao Zhen, A Mian Jin, Zhang Ca Cheng, and Yu Da advanced wave upon wave for the birth of a new China, and, in the end, the flow of flesh turned into a river of blood.

The Si Chuan University has historically had a very simple and plain style of study. The school is managed strictly, emphasizing development of talented men and women, and the employment of accomplished, talented teachers. In regards to the needs of the students, the school is also fairly strict. Many professors and scholars propagate the doctrine of the ancient sages, and have generated superb literary accomplishments. The expansion and development of Si Chuan University, in literature, government, finance, as well as mathematics, physics, and biology, in all respects, has been through the attainment of outstanding achievements, and it is inter-related to the expansion of the number of professors and their scholarly contributions.

After the liberation, the school continued with and developed the excellent traditions and conventions of the older generation school. It absolutely stressed the education of basic foundational theory and training in basic abilities. The teachers with experience that were moved in began teaching the foundational courses. Presently, they are in the midst of completing key curriculum developments, writing them in the standard form of the Chinese characters, and, in this manner, are emphasizing the education of basic or foundational theory and the characteristics of research work. A group of them have created a scientific collective of courses. These courses that are emphasized are in mathematics theory, topology, laser physics, laser chemistry, physio-chemistry, laser optics information transmission, atomic sciences, natural organic chemistry (placing particular emphasis on steroids), wireless radio physics, studies in botannical toxicology, plant seed genetics, and, as well, modern Thai history, studies in literary classics, the archaeology of Xi Nan, the geographic history of Si Chuan, literature of the Tang and Song Dynastjes, modern literature, Chinese, etc. The assistant school administrator, Professor A Tai, in regards to mathematical theory research of the text((Nathematics Theory)), has solved the proposal of the French mathemetician Ka Te Lan (TN: transliterated name). which had, for over a hundred years, been an unresolved problem in mathematics research. With the results of the work of Professor A Tai, the famous American mathematician Nordell designated it as A's Theorem in one of his specialized texts. The department chief of the Mathematics Department, Professor Lan Bao Ning, and others, in regards to research on non-distinct topology, have distinguished themselves by writing the proposal of "New Ideas for Old Concepts", which was praised by mathematics scholars nationally and internationally as a work that "set the foundation for non-distinct topological

research"; works of renown topologists from Ying Ye to Fu Cheng Bo have been said to be "of the highest levels in the world". Professor Fang Wen Bei has long been engaged in teaching classes in botannical toxicology. Additionally, he has written specialized texts, and has been a great influence in this field of study nationally and internationally. The department chief of the History Department, Professor Yu Zhong Ye, in regards to work on modern Thai history and ancinet written character studies, has expounded on and discussed these topics brilliantly, creating a school of thought uniquely his own. Professor Xie Wen Yu, in regards to foreign languages, Professor Can E, in regards to history of the Three Kingdoms and the Northern and Southern Dynasties, Professor Yang Ming Zhao, in regards to research on literary carvings, etc., all have great knowledge and wisdom, and have independently established their own ideas in their respective fields of study.

In March of 1977, at the National Science Committee meeting, the school had 21 articles of major research that received awards. Among them, there were six that were selected for an international showing at an exposition, such as works in mathematics theory, a printing machine that resists drying out (TN: self lubricating), laser separation of beron particles, etc. In the last four years, the school has had 36 major research articles produced, in such areas as particle chemistry, mathematics, genetics, laser optics information transmission, laser physics, laser chemistry, botanical toxicology, etc., that have received technology awards. In addition to these, there have been 448 essays that have been publinhed in journals both nationally and internationally. In aspects of the social sciences, the school's teachers have, since 1978, completed a total of 50 written texts, and over 700 essays have been composed, most of which have been published.

In the 30 years since the liberation, the Si Chuan University has produced over 20,000 graduates and research students for the country. This is over three times the number (7,100) of the 18 years of the pre-liberation era, calculating from the time of the school's establis ment to the eve of liberation, or the graduates of the last 45 years.

Currently, the Si Chuan University has 10 departments with 31 specialties. The program of study is four years in length. At this TN = Translators Note time, there are 38 courses with research students enrolled, and their program of study is two years in length.

DEPARTMENT OF CHINESE Chinese Literature and Language Specialty Journalism Specialty

DEPARTMENT OF HISTORY History Specialty Archaeology Specialty

DEPARTHENT OF FOREIGN LANGUAGES English Specialty Japanese Specialty Russian Specialty

DEPARTMENT OF PHILOSOPHY Philosophy Specialty

DEPARTMENT OF ECONOMICS Government Economics Specialty

DEPARTMENT OF MATHEMATICS Mathematics Specialty Computer Mathematics Specialty Computer Software Specialty

DEPARTMENT OF PHYSICS Physics Specialty Solid Physics Specialty Semiconductor Specialty Nuclear Physics Laser Sciences Specialty DEPARTMENT OF CHEMISTRY

Chemistry Specialty Organic Chemistry Specialty Analytical Chemistry Specialty Macromolecular Chemistry Specialty Radiological Chemistry Specialty Physio-chemistry Specialty

DEPARTMENT OF BIOLOGY Botany Specialty Zoology Specialty Microbiology Specialty Genetics Specialty Biochemistry Specialty

DEPARTMENT OF WIRELESS RADIOS Wireless Radio Physics Specialty Wireless Radio Electronics Specialty Computer Science Specialty

In 1980, there were 4,048 undergraduate students and 69 research students attending the school. There was a staff of 3,105 personnel. Among them were 1,148 teachers. Among the teachers were 33 professors, 81 assistant professors, 695 lecturers, 16 teachers aides, and 323 assistant teachers. The school also had 13 invited foreign teachers who had assumed posts as foreign language instructors. Additionally, the school frequently invites famous science scholars to come to the campus and lecture; it also sends a few scholars and research students abroad for classes, visits, and advanced study work.

Following along with the development of international cultural exchange, the Si Chuan University, along with a few foreign institutions of higher learning and technology organizations, has established an academic and technological exchange liason that promotes the development of the sciences and their research for the school.

The Si Chuan University has established five research organizations for Nuclear Science and Technology, Southeastern Asia, population control, Chinese language and literature, and history, as well

1000 2000 L

as local research sections for religion, accoustic waves, and revolutionary eras of Si Chuan, and, also, there are other specialized research sections and organizations. There are a total of 182 research personnel employed. Distinctive features of the scientific research orgainzations and the curriculum include: emphasis on scientific research and the teaching of scinece, combining the producing of research students with the emphasis of research on the region's government, economics, history, nationalities, and socialism, as well as integrated teaching and a staff of well known authors.

Regularly published materials of the school include the Si Chuan University School Paper (published by the natural sciences and social sciences departments) which is nationally and internationally distributed. Periodicals, published on an intermittent basis include the "Discussions of the Research on the Works of Guo No", "Discussions on Population Research", "Discussions on Soviet Research", as well as "Southeast Asian Research Materials", "Explanations in Population Theory", and "Selected Works on Atomic Energy Technology", etc.

The Si Chuan University library currently has a collection of over 1,800,000 books (including over 2,000 types of periodicals) and periodicals. Inside the library are over 1,110,000 books on the social sciences, and over 700,000 books on the natural sciences; in looking at the language books, over 1,350,000 are in Chinese, adn over 450,000 are foreign texts.

The Si Chuan University has established a relatively large historical museum, and there are zoological and botanical speciment rooms. The history museum has over 35,000 historical, revolutionary national, and cultural articles. Among them are a few of the country's national treasures. The zoological and botannical specimen rooms have collected and preserved precious specimens from the two southwestern regions of the country.

The school currently has around 17,000 different instruments and devices, which is over 10 times the number of pre-liberation days.

The school manages an instrument factory, a printing house, a kindergarten , a health care clinic (including the newly constructed

outpatient and inpatient sections) for the teachers and students, for research training and convenience. Additionally, 70 kilometers away from the campus, in Peng County, at the Hang Tan Commune, there is an experimental farm with an occupied surface area of 270 mu, used for scientific experiments and basic research.

The Si Chuan University campus occupies an area of 900 mu. Campus constructed facilities occupy a surface area of over 250,000 square meters. This is over six times the pre-liberation era surface area of 37,000 square meters.

> Commencement Date: November 9th Party Secretary: Zhao Yi

?

Chong Qing University

Campus Address: Sha Ping Embankment, Chong Qing City, Si Chuan Province

The Chong Qing University was founded in 1929, and has over 50 years of history behind it.

When the Chong Qing University was initially built, there were only two preparatory courses in literature and science. In 1932. the Institute of Literature and the Institute of Science were built, and enrollment of undergraduate students began. The Institute of Literature established two departments. They were the Department of Chinese Language and Literature and the Department of Foreign Languages and Literature. The Institute of Science established three departments in mathematics, physics, and chemistry. In 1933, an agricultural institute was also established. In 1935, the provincially established Institute of Industry merged with and entered the school, establishing an industrial institute, which, in turn, established the Department of Electric Hotors and Generators, the Department of Civil Engineering, and the Departmnt of Mining and Metallurgy. After 1936, at around the same time, an Institute of Commerce and advanced studies course in physical education were also established. 27 t. end of 1942, the school had established three institutes with 12 departments. In 1945, an Institute of Law was established, and by 1949, on the eve of liberation, the school had established a total of six institutes in science, industry, literature, law, commerce, and medicine. There were over 20 departments in mathematics. physics, chemistry, geology, machinery, electric motors, mining and metallurgy, construction, civil engineering, chemical industries, foreign languages, Chinese, education, government, law, economics, accounting and statistics, banking and insurance, management, and medicine, as well as an advanced studies course in physical education. There was a staff of over 400 personnel, and the largest number of students attending the school at one time was nearly 2,000.

The Chong Oing University has a glorious revolutionary tradition.

Before the liberation, the teachers and students, under the or ~anization, influence, and leadership of the Chinese Communist Party. propagandized thoughts on the democracy, and led an unswerving and unvielding struggle against the dark rule of those dispatched by the Nationalist Party. During the time of the second civil revolution of the nation, the underground party started it's activities at Chong Qing University. In early 1938, the underground party of Chuan Dong established a party headquarters at Chong Ging University. Towards the end of 1938, after Zhou En Lai came to Chong Oing and assumed the position of Party Secretary for the Southern Eureau, he greatly stressed the importance of the student's work. Additionally, at the invitation of the National Patriots Committee of Chong Cing University, he personally delivered a speech on February 7th of 1046, and it received the laudation of over 3,000 teachers and students, both in and out of the school, and it greatly influenced and encouraged these teachers and students. In the 1946 anti- Mei Kan~ Bao movement, in the 1947 anti-hunger movement, in the anti-civil war and anti-persecution movements, and in the just-treatment, just-existence. and just-democracy movement of late 1949, the teachers and students of the Chong Qing University centralized Industrial Institute, the female teacher's institute, and the Si Chuan Teacher's College, as well as other schools, for a total of eight schools or institutions, united to carry out a very large demonstration by picketing classes. resisting a show of force, and welcoming in the birth of a new China.

After the liberation, based on the requirements established by the national industries, the overall strategies of the governmental bureaus, and, after going through an institutional re-organization, it was decided that the school would become a multi-science industrial college for the production of talented men and women in industrial technologies. They took the original departments of machinery, mining and metallurgy, and electric motors and generators, and other engineering science courses, and expanded these courses into departments in machinery, motive force, electric motors and generators, ore dressing, metallurgy, etc. Additionally, the five institutions of literatume, science, law, commerce, and medicine, as well as the departments in chemical industries, construction, civil engineering, etc., were reorganized into various other institutions. Since that time, the school has had a large scale and speedy development. The quality of teachinhas also been constantly rising. In 1960, following the development of the electronics industry, a Mew department in wireless radios was established. By 1966, the whole school had six departments in machinery, motive force, electric motors and generators, ore dressing, metallurgy, and wireless radios. There were 15 specialties. There were, at the most, over 7,000 students attending the school.

During the Decade of Turmoil, the Chong Oing University was completely destroyed. Student enrollment stopped for a period of over six years. At the least, the school has produced around 10,000 graduates for the country, all of whom are men and women with technological ability. In 1972, although student enrollment had been restored, the mathematics, research, and teaching equipment and facilities were still being destroyed, as well as the management and organization of the university; the work of teaching could not often be done. There was no way for research work or experimentation work to develop, and this greatly influenced the quality of teaching.

After crushing the "Gang of Four", and after undergoing reorganization and restoration, the Chong Ding University gradually returned to normalacy; the quality of teaching again began to constantly rise. In the last three years, based on the development of scientific technology and the requirements of modernization, the departmental courses and specialties were re-organized. A few new science courses were added, and specialties in industrial automation, survey technology, and instrumentation and automation were added. There are nine departments that have been formed with 28 specialties, and there are three teacher's courses.

## DEPARTMENT OF MECHANICAL ENGINEERING I Machine Manufacture, Craftsmanship, Facilities, and Automation Specialty Automation Specialty Automotive Specialty Applied Nechanics Specialty

DEPARTMENT OF MECHANICAL ENGINEERING II Forging Specialty Casting and Founding Specialty Welding Specialty Heavy Machinery Specialty

DEPARTMENT OF ELECTRICAL ENGINEERING Electrical Systems and Automation Specialty Electric Notors Specialty High Voltage Electrical Technology and Equipment Specialty Electrical Industries Specialty

DEPARTMENT OF THERMAL ENGINEERING Electric Plant Thermal Notive Force Specialty Engineering Thermo-physics Specialty

نور...

DEPARTMENT OF MINING ENGINEERING Mining Engineering Specialty Mining Machinery Specialty Mining Engineering Physics Specialty

DEPARTMENT OF METALLURGICAL MATERIALS ENGINEERING Metallurgical Chemistry Specialty Metal Materials Specialty

DEPARTMENT OF WIRELESS RADIOS Wireless Radio Specialty

DEPARTMENT OF COMPUTERS AND COMPUTER AUTOMATION Computer Engineering Specialty Industrial Automation Specialty Survey Technology and Instrument Automation Specialty Photo-electric Precision Machinery Specialty Electromagnetic Measurements Specialty Computer Software Specialty

# DEPARTMENT OF BASIC SCIENCES

Applied Nathematics Specialty Applied Physics Specialty Applied Chemistry Specialty Teacher's Course in Political Theory Teacher's Course in English Language Teacher's Course in Physical Education

In the establishment of the specialties, a relatively thorough system of industrial science courses was created. Among them, many of the courses have been established for a long time, such as those in machine manufacture, electric motor and generator nower, metal ore dressing, thermo-dynamic force, etc., as well as the newer courses in computers, automation, and wireless radios, all of which have strengthened the specialties and are outstanding.

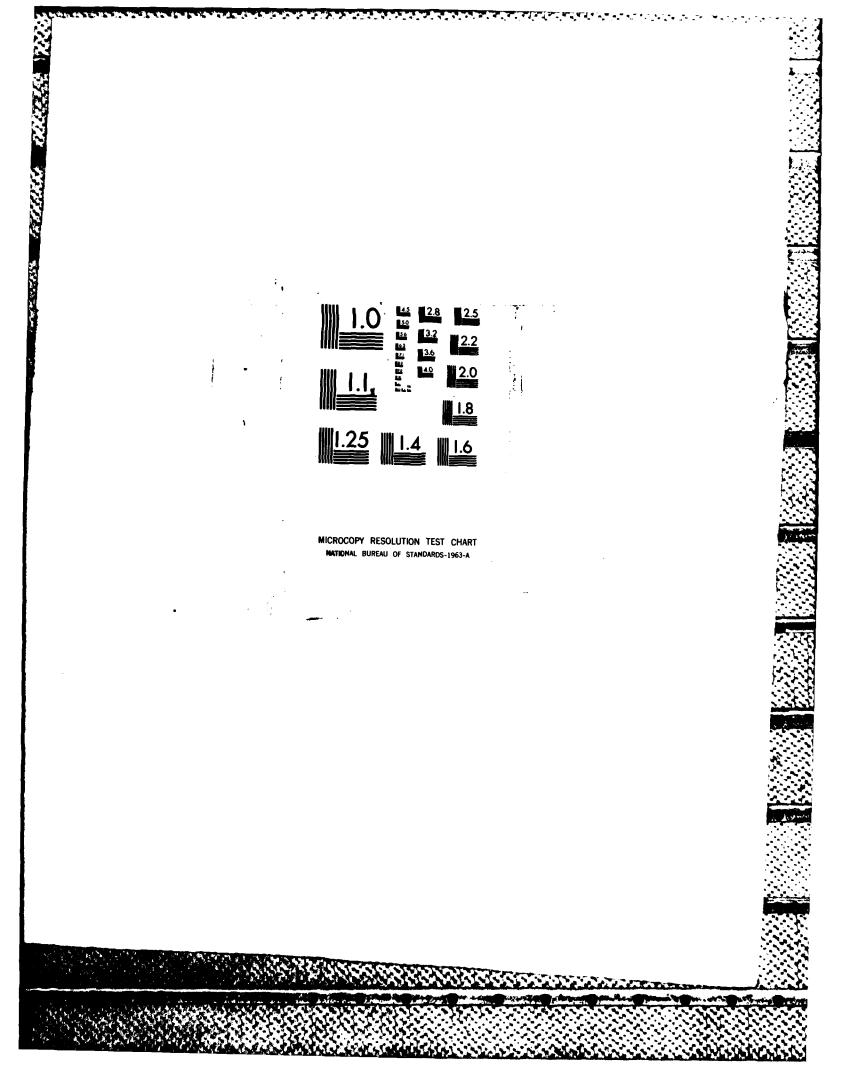


A view of Chong Qing University

In 1980, there were 4,530 undergraduate students atcending the school, and there were 95 research students in attendance. The night school for the university has restored student enrollment. In the 30 years after the liberation, the school has produced over 21,000 undergraduates, and over 200 research students for the country. At the same time, many types of training courses have been conducted that have produced over 14,000 technically trained personnel for the requiremnts of the mining and industrial enterprises of our country.

The entire school has a staff of over 3,000 personnel. Amony them, there are over 1,200 teachers and researchers. Amony the table ers and researchers, there are 113 professors and assistant errors a sors, 757 lecturers, and 30 assistant teachers. A new of the

| AD-A137 587 BRIEF INTRODUCTION TO HIGHER EDUCATION INSTITUTIONS IN<br>CHINA(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH<br>12 JAN 84 FTD-ID(RS)T-1082-83 |          |                |  |  |  |   |       |      |    |  |       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------|--|--|--|---|-------|------|----|--|-------|
| UNCLASSIFIED                                                                                                                                                   |          |                |  |  |  |   | F/G 5 | 29 . | NL |  |       |
|                                                                                                                                                                |          | <u> - 11-2</u> |  |  |  |   |       |      |    |  |       |
|                                                                                                                                                                |          |                |  |  |  |   |       |      |    |  | iuns: |
|                                                                                                                                                                |          |                |  |  |  |   |       |      |    |  |       |
|                                                                                                                                                                | <b>a</b> |                |  |  |  | 1 |       |      |    |  | ÷     |
|                                                                                                                                                                |          |                |  |  |  |   |       |      |    |  |       |
|                                                                                                                                                                |          |                |  |  |  |   |       |      |    |  |       |
|                                                                                                                                                                | 17       |                |  |  |  |   |       |      |    |  |       |
|                                                                                                                                                                |          |                |  |  |  |   |       |      |    |  |       |



nation's well known scholars and specialists came to the school in the early thirties, and have been engaged in the work of teaching and lecturing since them. Their contributions in their work have been invaluable, especially in Chong Qing University's development. For example, some of them are Li Si Guang, Ha Yan Chu, and A Shi. Currently, there are a group of well learned professors with a great deal of wisdom and knowledge at the Chong Qing University who are engaged in teaching. In recent years, in order to elevate the academic level of technology, an international literature exchange program has been developed. The Chong Qing University has, along with several other teaching and research organizations, set up exchange agreements. National and international scholars come to this school and lecture on a gradually increasing scale. Currently, there are six such specialists at the school who have been invited to teach.

In order to suit the needs and requirements of national modernization, and, at the same-time, improve the mission of teaching at Ching Qing University, active development of research work has occurred. Furthermore, excellent results have been achieved. At the National Science Committee meeting in March of 1978, there were 11 research articles that received commendation. Additionally, there were 92 articles of scientific research work that received commendations from the Si Chuan Provincial Scientific committee or the Chong Qing University Science Committee. The young assistant professor Zhang Guang Hui, in regards to research work on "Quadratic planar matrice radian wormshaft transmission drives" was commended as being a very progressive researcher, and his project was circulated among all of the members of the National Science Committee meeting. In 1979, the Chong Qing University received the 1st place National Discovery Award for its participation in the research on higher titanium. type vanadium-titanium magnetic smelting processes. Professor Zhou Qi Lan has long been engaged in research in fluidics theory and technology, and he wrote the essay ((A Discussion and Explanation of Fluidics in the Last Twenty Years)), which was read at the International Fluidics Technology Discussion Committee meeting that was convened in America. It was well received and praised. Assistant professor Wu Yun Ji, in research on biomechanics, achieved great success from

664

his writing of the ((Body Fluid Characteristics in Medical Recuperation Applications)) essay, which was a part of the agenda of the 1979 international ASNE/CSNE technology conference held in America. It received great emphasis. Assistant professor Chen Ting Gui has long been engaged in research on computer reliability and theory, which was a part of the agenda of the 10th session of the international Computer Systems Technology Conference in Japan. Additionally. Assistant professor Guan Chang Hu, in regards to research on "radian gear conical gearwheels and dual circular surfaced gear wheel teeth in application and theory", has had outstanding results. Assistant Prcfessor Zhang Ming Dao, in regards to research on "thermal transfer. transfer properties, and thermal invigaration theory and research" has achieved excellent results. He has received National Science Committee and Provincial commendations. The Chong Qing University is presently establishing a research institute for precision electric machinery, a research institute for compound and synthetic metals, and a research institute for mechanical engineering. Presently, there are 130 scientific research instructors employed. Among them are four professors, 20 assistant professors, 72 lecturers, and 34 assisttant teachers.

والمراجع المراجع المراجع

The whole school currently has 60 research classrooms and 64 experimental laboratories.

The school library has been newly built, with a surface area of over 7,000 square meters. There are presently over 800,000 books and periodicals available. Among them, there are over 260,000 foreign texts and periodicals. There is also a foreign materials center and a foreign materials library established. Regularly published periodicals include the ((Chong Qing University School Paper)).

The Chong Qing University manages four factories, a machine factory, an electric motor and generator factory, a radio factory, and a steel mill. They are used for teaching, research, and student on the job training.

The school is affiliated with it's established "night school", which has two specialties in machine manufacturing and industrial automation which have been established on a temporary basis. In 1980, there were 163 students enrolled. There is also affiliation with an elementary school and a kindergarten The Chong Qing University occupies a surface area of 1,030 mu. Campus constructed facilities occupy a surface area of over 220,000 square meters.

School Commencement Date: October 12th Current School Administrator and Party Secretary: A Wen Tie



The Chong Qing University Campus.

The Cheng Du College of Science and Technology Campus Address: Lu Zi

N.

Campus Address: Lu Zi Bridge, New South Gate, Cheng Du City, Si Chuan Province

The precursory organization to the Cheng Du Colleze of Science and Technology was the Cheng Du Industrial Institute.

The Cheng Du Industrial Institute was formed in the 1954 national re-organization of institutions of higher learning by taking the Si Chuan University Industrial Institute and using it as a foundation for the merger with Yun Nan University, the Xi Nan Industrial Mocational School, and other school's water conservancy departments and courses. When the school was first built, there were four departments established in machinery, civil engineering, electric motors and generators, and water conservancy. Later, five specialties in highways and city streets, bridges and tunnels, river structures and hydroelectric station construction and engineering, machine manufacturing and craftsmanship, and power plant grid networks and electric power systems, as well as an advanced course in water conservancy technology and construction were establihsed. There were 1,271 students attending the school, and there were 154 teachers.

In 1955, the Si Chuan Chemical Industrial Institute merged with the Cheng Du Industrial Institute, and it's name was changed to the Cheng Du Industrial Institute.

The original Cheng Du Chemical Industrial Institute was founded in 1952. At that time, the relevant departments and courses of Chong Qing University, Si Chuan University, Xi Nan Agricultural Institute, Xi Nan Industrial Vocational College, the Chuan Nan Industrial Vocational College, Yue Shan Vocational School of the Arts, and Xi Chang Vocational School of the Arts merged for it's creation. There were six specialties in inorganic chemo-physics industries, plastics industries, leather and fur hide tanning arts, plant fibers and paper milling industries, sugar products industries, and chemical products, machinery, and facilities. Cheng Du Industrial Institute, after the merger, established five departments in machinery, electric motors and generators, chemical industries, water conservancy, and civil engineering. There were 11 specialties. The institute had a total of 2,140 students in attendance, and the number of teachers had increased to 296.

In 1956, the specialty of plant fibers and paper milling industries was transferred to Tian Jin University. The specialty of sugar products industries was transferred to Hua Nan Industrial Institute. The advanced studies course in water conservancy technology and construction ceased to be managed.

In 1960, the school started managing a department in mathematics theory and a department in mechanics, as well as a specialty in electronic computers. In 1961, the Department of Civil Engineering was transferred to the Chong Qing Communications Institute.

In 1963, the Department of Mathematics Theory and Lechanics, and the specialty in electronic computers ceased to be managed.

From this time, throughout the re-organization, and until 1966, the Cheng Du Industrial Institute had permanently established five departments with 17 specialties and one foundational studies section. They are cited below:

the Department of Mechanical Engineering, with three specialties established in machine manufacturing craftsmanship and facilities, casting and founding craftsmanship and facilities, and machine manufacturing measurement instruments; the Department of Electric Notor and Generator Engineering, with three specialties established in power plant grid networks and electric power systems, industrial enterprise electrification and automation, and electric motors and generators; the Department of Basic Chemical Industries, with four specialties in inorganic chemo-physics industries, basic organic chemical synthetics industries, chemical industries machinery, and rare elements industries; the Department of Macromolecular Chemical Industries, with four specialties established in plastics industries, chemical fibers, the study of synthetic rubber, and leather industries; the Department of Water Conservancy, with three specialties established in river centers and hydroelectric power station construction, dry land hydrology, and agricultural field water conservancy. Aside from the five and one half year program of study for the rare elements industries specialty, the program of study for the other specialties was five years in length.

The greatest number of students in attendance was around 5,357 (in 1963). There were 965 teachers.

During the Decade of Turmoil, student enrollment stopped for a period of over five years. In 1972, student enrollment was restored, and the program of study for each specialty was changed to three years in length. After crushing the "Gang of Four", the Cheng Du Industrial Institute carried out a complete restoration and re-organization. In 1977, the program of study for the specialties was changed to four years in length.

In October of 1973, after obtaining approval of the State Council, it was decided that the Cheng Du Institute would change it's name to be the Cheng Du College of Science and Technology. In addition to this, it was re-aligned to be subordinate to the Ministry of Education.

After the establishemnt of the Cheng DuCollege of Science and Technology, a re-organization of the original specialties was carried out to establish more specialties for the separate sciences. Currently, there are 10 departments with 21 specialties or specializations.

DEPARTMENT OF MECHANICAL ENGINEERING

Precision Machinery Design and Manufacture Specialty

Precision Measurement Instruments Specialty

DEPARTMENT OF ELECTRONIC TECHNOLOGY and ELECTRIC POWER ENGINEERING

> Electric Power System Engineering Specialty Automation and Control Specialty Information Engineering Specialty Electronic Computer Specialty

DEPARTMENT OF CHEMICAL ENGINEERING Chemical Engineering Specialty Chemical Industries Machinery

DEPARTMENT OF WATER CONSERVATION ENGINEERING

Water Conservancy and Hydroelectric Engineering Specialty Hydrology and Water Source Utilization Specialty

DEPARTMENT OF METAL MATERIALS Metal Materials Engineering Specialty Chemical Metallurgy Specialty

DEPARTMENT OF MACROMOLECULAR MATERIALS Macromolecular Synthesis Specialty Macromolecular Materials Engineering Specialty Leather Manufacturing Specialty

DEPARTMENT OF ENGINEERING MECHANICS Fluid Mechanics Specialization Solid Mechanics Specialization

DEPARTMENT OF APPLIED MATHEMÁTICS Applied Mathematics Specialty

DEPARTMENT OF PHYSICS Physics Specialty

DEPARTMENT OF CHEMISTRY Theoretical Chemistry Specialization Analytical Chemistry Specialization

In 1980, there were 3,309 undergraduate students attending the school, 22 research students, 62 advanced studies students, and 647 students who were enrolled in seminar training.

The school currently has a staff of 2,690 personnel, of whom 1220 are teachers. Among These are 18 professors, 488 lecturers, 164 teacher's aides, and 481 assistant teachers.

The Cheng Du College of Science and Technology is Xi Nan region's largest such school. It is an integrated university of science and industry that offers more courses than any other school in the region. Many of the departments and courses have been managed by the

670

school for quite a long time. The teaching strength is relatively good, and scientific research has been comparatively successful. For example, the macromolecular synthesis specialty, which was one of the first established in the country. Throughout the nation, many of the teaching materials related to macromolecular science for institutions of higher learning's related departments, as well as their teachers, who are mostly graduates of the fifties, came from this school, and each year, this department is responsible for the production of over 10 research articles. Professor Yu Xi, a macromolec-



## The Cheng Du College of Science and Technology's Teaching Building #1.

ular specialist. and a member of the National Science Committee's macromolecular section, was the first person to take the local nutgall as a source material for experimental production of plastics materials, and he also planned for the establishment of plastics industries specialties in our country. He is currently head of the Department of Macromolecular Materials, and concurrently, the Macromolecular Materials Research Institute Administrator. Professor and Doctor Zhang Jin, a talented leather specialist (who has already passed away) established the leather specialty first hand, and was our country's most important teacher for the specialty of leather handicrafts industries. In aspects of teaching the art of industrial leathers, and in teaching materials on this subject, most of the textbooks and written materials printed were edited at this school. In aspects of scientific research, he opened the territory of research in the areas of structural organization of pig skin, organizational chemistry, plant hide materials, theory and efficiency of leather

.....

processing machinery, and metal complex compound hide materials. Additionally, he led the Chinese delegation in the international leather industries conference, where he read aloud essaws on the continuing flow of technology. Another example is the creation of the Department of Water Conservation Engineering from among the assemblage of the five departments of water conservancy taken from the various universities of Xi Nan region. It has long been engaged in the missions of producing talented men and women who are trained in water conservation, hydroelectric construction, the expansion of water conservancy for Xi Nan region, and hydroelectric engineering research and sciences. All of the watershed conservation engineering and research projects and experiments of the region were started from this school. In the last nine years, this department has assumed responsibility for nearly 40 water conservancy engineering and research projects. Among them, four received National Science Committee awards, one received an award from the Ministry of Water Conservation. 15 received provincial awards or municipal commendations. The other departments such as the Department of Chemical Engineering and the Department of Engineering Mechanics each have their own unique characteristics.

a a construction and a second sec

The Cheng Du College of Science and Technology has done well in the management of basic science and industry courses, and in the development of technology, new products, and new materials, it has opened up the periphery of a new frontier, crossing into new regions of science. In order to develop the technology and sciences for the country and the region (especially Si Chuan Province), and from an economic standpoint, the school has brought in teachers and researchers, all talented men and women of ability, with their wisdom and knowledge in the fields of machinery, chemical engineering, electronics. water conservancy, Macromolecular and metal materials, as well as other scientific, engineering, and technical fields. In the 28 years since the Cheng Du College of Science and Technology has been established, in it's endeavors to give the best classroom training, it has developed many types of management styles and methods. In 1956, it opened up a night school, and enrolled students in the specialties of machine manufacturing craftsmanship and facilities, electric power plant grid networks and electric systems, and industrial

enterprise electrification and automation. It has, just this year, started re-enrolling students. Since 1960, a correspondence course program has been offered, with specialties in dry land hydrology, river centers and hydroelectric power station construction, electric power plant grid networks and electric power systems. It also manages a class for older cadre. Research students have been enrolled since 1957 (this stopped during the Decade of Turmoil, but was restored in 1977). Taking into account these above mentioned management styles, the school has produced a total of 26 research students for the country, over 17,310 undergraduate students, over 205 night school graduates, over 288 correspondence course graduates, more than 38 older cadre, and 419 advanced studies students from other units for the nation. In addition to this, the school has conducted every type and kind of training course and seminar, over a hundred times in all, that have produced more than 20,000 students.

Since the school has been built, the ever-expanding student body has developed a simple and plain, diligent and conscientious, excellent school spirit. When the students are in school, they study very hard, their work is taken seriously, and much attention is given to their educational training. When they leave the school and go to work on their jobs, the majority of them have a diligent and conscientious spirit in their work. Many of the graduates of the fifties and sixties are already becoming the corps of strength or back bone in their fields. Let's take, for example, the 3,900 plus graduates from the Pepartment of Water Conservancy that have been produced since the school's establishment, these people have become the cadre for the various counties and regions of Si Chuan and Xi Nan, it is they who have developed and established the construction of water conservation technology for these regions.

The Cheng Du College of Science and Technology has established three research institutes in water conservation, macromolecular materials, and engineering mechanics, as well as three research sections in applied chemistry, indirect chemical synthesis in mining applications, and leathers. The school is responsible for producing over 100 research articles and projects for 10 national ministries and over 10 reg and .nits. The teachers of the school participate in research projects about 20% of the time in their work. There are over

673

300 personnel assigned who are full time researchers. There has already been a significant number of research projects that have reached national and international levels of technology. In 1973, at the National Science Committee meeting, there were 13 commendations received. At the provincial technology meetings, over 43 articles received commendations. Among them was the test manufactured 550°C emergency shield plating, of which some of the properties were tested with some Japanese imported products in 1975. It is already being implemented in industrial production; the metropolitan river barrier water conservancy center, altered in construction engineering studies and experiments on a temporary basis, and the scaled model experiments designed to re-unite the original flow of river water broken by the barriers, sedimentation patterns, sluice gate opening theory, and experiments for dam floodgate positioning and water direction and control to prevent excess sediment buildup; the 1979 investigation of the BJY-1 type automatic percentage meter, that has been very successful in automated precision measurement usage. Research in 1980 on the PPb layered sublimed sulfur atmospheric measurement and detection device received national praise and complete support, and the sublimed sulfur atmospheric measurement and detection device's automation and successive improvements have been a great boon for industrial environmental measurement applications. It has provided yet another stage of advances in research for the school.

In recent years, the Cheng Du College of Science and Technology has increased and strengthened it's technological exhange activities, both inter-collegiately and internationally. Aside from inviting guests, foreign specialists, and scholars to teach or lecture, the college also sends selected teachers abroad to advanced institutions of higher learning and to research organizations for studies, investigations, to conduct research, or to participate in technological exchange activities. In the last two years, over 80 foreign specialists, scholars, and overseas Chinese have been invited to observe, visit and lecture at the College.

• The school currently has 71 experimental laboratories, each equipped with fairly modern equipment and instrumnets.

The Cheng Du College of Science and Technology is affiliated with the school managed factories, primarily for teaching and research work. They also produce a limited quantity of products. In addition, there is affiliation with a printing house, and a kindergarten.

The school library currently has a collection of over 660,000 books. Among them are 520,000 Chinese texts and 140,000 foreign texts. There are 4,500 types of periodicals available, and among them are 2,640 Chinese periodicals and 1,860 foreign periodicals.

The Cheng Bu College of Science and Technology occupies a land surface area of 415 mu. Campus constructed facilities occupy a surface area of over 180,000 square meters.

> Current School Administrator and Party Secretary: Zheng Tang

XI NAN TRAFFIC AND TRANSPORTATION UNIVERSITY Campus Address: E Mei County, Si Chuan Province

The Xi Nan Traffic and Transportation University (originally the Tang Shan Railway Institute) was founded in 1896. Its precursory organization was the Bei Yang Railway Management Institute of Shan Hai Guan. In the 1890's, under the influence of a wave of reformation, the government was asked to take charge of the new policies towards westernization. In looking at the development of the government railroads, there was too much reliance on the West for repair and management, and this was not the ideal method to be used. It was decided that a school must be established to produce men of talent and ability. As a result, in 1896 the Bei Yang Railway Management Bureau established the Bei Yang Railway Management School of Shan Hai Guan. This was the earliest known advanced institute of higher learning for railways in our country and also it was the first industrial sciences school in our country. It began with the establishment of some 20 courses in natural sciences and industrial engineering. In 1900, the first group of students graduated. In the same year, because of the invasion by the Eight Power Allied Forces, the school was beseiged and forced to cease operations. In 1905, the Railway Bureau, managed by national and international parties (which was originally the Bei Yang Railway Management Bureau) and the Mineral Exploitation Bureau joined together in Tang Shan to restore and rebuild the school. The name was changed to the Tang Shan Railway and Mineral Academy. Three departments in railway engineering, machinery and mining were established. There were 190 students enrolled. In 1907, the school was placed under the jurisdiction of the Postal Ministry. In 1912, this changed and the school was placed under the leadership of the Ministry of Traffic and Transportation. In 1913, the school changed to become the Tang Shan Industrial Vocational School. In 1921, the Ministry of Traffic and Transportation of the war lord government took the Shang Hai Industrial Vocational College, the Tang Shan Industrial Vocational School, the Bei Jing Railway Management Sciences College and the Telecommunications College and merged them

together to form the nationally established Traffic and Transportation University. The Department of Machinery in the Tang Shan School was dispatched to and reorganized into the school in Shanghai. The Civil Engineering Department in Shanghai was likewise sent to and reorganized in Tang Shan. The school name was changed to Tang Shan Adjunct School of the Traffic and Transportation University. In the summer of 1922, the Traffic and Transportation University was abolished and Tang Shan University was established. In 1928, the government of the Nationalist Party established a Ministry of Railways, and the school was placed under the leadership of the Ministry of Railways. In a short time, the Tang Shan University, Bei Jing Traffic and Transportation University and the Shanghai Traffic and Transportation University were again taken and merged together to create the Traffic and Transportation University. The Tang Shan school's name was changed to the Tang Shan Traffic and Transportation University and later, it was changed to the Second Traffic and Transportation University. In 1931, the Tang Shan school's name was again changed to the Tang Shan Industrial Institute and in addition, a department in mining and metallurgy was added.

In 1931, after the Japanese imperialists invaded and occupied the northeast, and after He Bei fell under the control of the Japanese aggressor army, in 1935 an ardent effort was made to put together and establish the reactionary communist He Bei autonomous government. This made He Bei region hang out fake flags and the Tang Shan University teachers and students in their indomitable spirit hung the national flag on their campus in order to maintain classes. At the same time, the Japanese Resistance Rescue Movement, under the leadership of the Chinese Communist Party, formed a vanguard on campus and many students rushed to join and go to Yan An. In 1937, when the War of Resistance against Japan erupted, the campus was occupied by the Japanese army. All publications and equipment fell into enemy hands. Under the national banner of the Japanese Resistance Movement, the teachers and students of the Tang Shan Traffic and Transportation University trekked across mountains and forded streams, from the flames of war in Hua Bei, passing through many places in the south, and endured the dispersion of

students and teachers of that time, enduring incalculable hardships, lack of facilities and equipment, and yet managed to teach by relying on the strength of the teachers and students of the regional schools in Xiang Xi of Xiang Nan where school was held. The school was placed under the administrative control of the Ministry of Education. In 1938, the Tang Shan Traffic and Transportation University merged with the Bei Ping Railway Management Sciences Institute and the Traffic and Transportation University. Because school facilities were insufficient, it was not long before the school moved from Xiang Nan to Yang Jia Nan. During the winter of the same year, because the Nationalist government had annihilated Chang Sha, the school was again forced to move west. While moving through Guang Xi, they were bombed and killed almost daily, and the losses suffered were very heavy. In early 1939, after traveling more than a kilometer in their journey, they arrived at Ping Yue in Gui Zhou (which is now Fu Xian in Gui Zhou) where they again began to conduct classes. The name was changed to the Gui Zhou Adjunct School of the Traffic and Transportation University. Three departments were established in civil engineering, mining and management. During the rigorous years in the War of Resistance against Japan, in the remote mountain regions, the older teachers of the Tang Shan Traffic and Transportation University taught their students with tireless zeal, and the many students that arrived from all regions of the socialist nation did their studies by the light of oil lamps. The teachers and students had the collective hope and aspiration that the day would soon come when they could walk with democratic independence on the path to freedom and economic development.

Because the Nationalist Party government was passive in its resistance against Japan, towards the end of 1944, the Japanese army arrived at Du Mountain and forced the school to move to the Ding Jia depression in the Bi Mountain range. In 1945, victory was achieved in the War of Resistance against Japan, and in 1946, the Tang Shan Traffic and Transportation University moved back to its original location on the Tang Shan Mountain in He Bei. The name changed to the nationally established Tang Shan Industrial Institute. It established four departments in civil engineering, construction, ore

dressing and metallurgy, as an advanced studies course in mining and metallurgy. The number of students in the school exceeded 500 and there were over 100 staff members and workers. Among them there were 31 professors and assistant professors.

a sa sa sa sa sa sa sa sa

N. 60 M

Since its founding, the Tang Shan Traffic and Transportation University has emphasized quality in teaching. For student enrollments, only the best qualified are selected. There is rigorous testing in their studies. On the eve of the War of Resistance, the school had a relatively complete collection of publications and equipment, and studying conditions were fairly good. As a result, the graduates of Tang Shan Traffic and Transportation University enjoyed a good reputation. In 1916, at the National Exposition for Institutions of Higher Learning, the Tang Shan Traffic and Transportation University received the first place award. Since 1919, the two most successful graduates of every class have been sent abroad at government expense for advanced studies.

Since the liberation, the Tang Shan Traffic and Transportation University has had a group of instructors that have devoted a lifetime to the cause of teaching. They have worked their hearts out, sparing no effort in the performance of their duties. From beginning to end, they have been the frontrunners in teaching support. Among those attracted to the job (TN: lit. those caught) are the 30 to 40 year old teachers, such as Meng Zhong You, Dun Zhi Sun, Wu Jing Chao, Huang Zhao Lan, Li Zei Ying, Shu Yuan Shi, and about 10 others. There are also several other well known scholars, such as Chuan Yi Sheng, Li Shu Tian, Fou Wu Hua, etc., who have been administrators or have assumed positions as teachers. These traditions have carried over after the liberation, and have influenced and urged other teachers to loyally support the party's educational causes. It has helped them to resolve to become trustworthy teachers in the eyes of the people.

Because of the example set by the teachers in their strict requirements, and due to environmental influences, the Tang Shan Traffic and Transportation University has gradually created and fostered a strict educational system, having conscientious student effort, simple and plain living, and an excellent school spirit.

The graduates of Tang Shan Traffic and Transportation University have become the technological strength of our country in its establishment of railways. Many individuals, in the fields of civil engineering, mechanics, ore dressing, metallurgy, transportation management, machinery, electrification, water conservancy, and other areas of technological research, have made very noteworthy contributions. Some have become famous scholars and specialists, for example, Lan Ke Zhi, Chuan Yi Sheng, Yan Yi, Zhu Ji Gang, Zhang Wei, A Mu, Yue Zu Kang, Fan Cheng Jiao, Yi Zhi, Lan Tian, Kan Fu Xian, Zhou Chong Jiu, Tang Pan Zhe, She Zhen Yuan, Yu Gen Shang and Hou Jia Yuan.

Since the liberation, the Tang Shan Traffic and Transportation University has had a glorious revolutionary tradition. Early in the "May 4th" Movement, the students who were greatly influenced by it published the paper "Rescue the Nation". Additionally, during the Workers Movement in Tang Shan, the students united, creating a mass demonstration for the anti-imperialism movement. In 1922, in order to support the workers' wage strike in the five major mining fields, the students called a strike on their classes. In 1924, the school established an underground party headquarters, and it actively encouraged students to go to the eastern regions where there were no schools and spread the teaching and doctrine of the Chinese Communist Party. During the War of Resistance against Japan, the students participated in the "December 9th" movement and also participated in the Resist Japan and Save the Nation movement. The school established the "Chinese Nationalist's Liberation Vanguard Unit" and a few students rushed off to Yan An. During the struggle for liberation, they conducted the anti-hunger movement, the anti-civil war novement and the "Struggle for Democracy, Struggle for Freedom" movements. In 1947, the "May 31st" incident occurred where Nationalist Party dispatched henchmen tried to beat the progressive students, and our three youth brigades soundly beat them. During these student movements, many revolutionary fighters exemplified themselves.

In December of 1948, Tang Shan was liberated and the Tang Shan Traffic and Transportation University returned to the loving and care of the people, where it was given a new life. In March of 1949,

the Shi Jia Chuang Traffic and Transportation University of Hua Bei merged with the Tang Shan Traffic and Transportation University. In the same year, the Chinese Central Military Committee took control of the Tang Shan Traffic and Transportation University and merged it with the Bei Jing Railway Management Institute to create the Chinese University of Traffic and Transportation. The Tang Shan branch was made an industrial school and the Bei Jing branch was made a management school. You Yu was made school administrator and promoted. In 1950, the school was changed to the Tang Shan Industrial Institute of the Northern Region Traffic and Transportation University. Under the concerned care of the party after liberation, the Tang Shan Industrial Institute underwent vast developments. Its facilities were refurbished and the school was supplied with the publications and equipment, many new experimental laboratories were built, and a few new science departments were added. Simultaneously, over 80 professors and assistant professors from within the country and abroad were invited to come and teach. In 1949, in addition to the original four departments in civil engineering, construction, ore dressing and metallurgy, three new departments in machinery, electric motors and generators and chemical industries were added. In addition, there were six two-year vocational programs established in automotive engines, automobiles, telecommunications, sign making, highway building and bridges. In 1950, a research institute for railway technology was also established (which later became independent and moved to Bei Jing; now known as the Railroad Sciences Research Institute). In the same year, the Materials Engineering Science Department of the Bei Jing Management School became a part of the Tang Shan school. The Tang Shan school's Construction Department likewise moved to Bei Jing (later it merged with the Tian Jin University). At this time, the whole school had a total of 236 teachers (among them were 82 professors and assistant professors and 26 lecturers), a staff of 274 personnel and 1755 students.

In order to suit the needs of the established economic requirements, in 1952 the national reorganization of institutions of higher learning took place. Based on the national realignment, the Ore Dressing Department of the Tang Shan school was sent to, and formed a part of the Bei Jing Mining Industries Institute; the Metallurgy Department was sent to and formed a part of the Bei Jing Steel Institute; the Chemical Industries Department merged with Tian Jin University; the geology teachers were sent to Bei Jing Geology Institute; the Water Conservancy section of the Civil Engineering Department was sent to Qing Hua University; and Chong Qing University and Ha Er Bing Railway Institute merged with the Tang Shan school. After the institutional reorganization, the school name was changed to the Tang Shan Railway Institute. It became an industrial science institution of higher learning. Four departments in railway construction, railroad bridges and tunnels, railroad transport machinery and electrical transport were established.

e Celen e l'elle l'elle l'elle l'elle l'elle l'elle l'elle l'elle d'elle de l'elle de l'elle de l'elle de l'elle

In 1956, the Tang Shan Railway Institute established a department in railway transport. In 1959, it added a mathematics and mechanics department, with specialties in applied mathematics, applied mechanics, applied physics and applied chemistry. Since then, the Tang Shan Railway Institute has started to develop in the direction of an industrial sciences college.

Since 1956, the undergraduate program of study has been five years in length and, furthermore, the enrollment of research students has begun.

Additionally, in 1955, the Tang Shan Railway Institute started a training class for cadre and in 1956, along with the Tang Shan municipality, the school has jointly administered the Tang Shan Municipal Industrial Enterprise School. A correspondence course in railway systems education was started in 1958.

Prior to the liberation, the Tang Shan campus occupied an area of only 230 mu. Campus facilities occupied a space of only 27,000 square meters. Since the liberation, the campus grounds have expanded to occupy an area of over 700 mu, and many new facilities have been constructed. In 1958, some of the facilities for a new campus were constructed, since mining had from 1951 on made the use of the original facilities or, for that matter, expansion of the campus impractical. Then the Railway Ministry decided that the Tang Shan Railway Institute would not move to Lan Zhou where the facilities had been built, but instead they would create and establish the Lan Zhou Railway Institute there. The Lan Zhou school's three departments in railways, bridges and tunnels and machinery, along with all of their teachers and equipment, were dispatched to and integrated with the Tang Shan school. In 1964, the Railway Ministry decided that the Tang Shan Railway Institute should move to E Mei in Si Chuan to have classes. The school actually did move in 1971 and in 1972, the name was changed to the Xi Nan Traffic and Transportation University.

After liberation, in the 17 years from 1949 to 1966, the Tang Shan school developed on an extremely large scale. There was also a very obvious elevation in the quality of teaching at the school. There was an extremely large increase in the number of publications and the quantity of experimental equipment. In the course of development, the school continued with and promoted the strict requirements created throughout the school's history, such as conscientious effort by the students, living plain and simple, etc., and this, in actuality, was a reflection of the school spirit. From among the large group of students produced in the 17 years since the liberation, many have become the backbone of strength in our nation's railway enterprise. They are the ones who are changing our nation's technology in the development of railway machinery, automation, electrification and science. They are using their talents and wisdom to the utmost. Some have become internationally famous scholars or model technological researchers.

During the Decade of Turmoil, the Xi Nan Traffic and Transportation University suffered heavy losses and was completely destroyed. Student enrollment stopped for over six years. In 1972, student enrollment was restored and the program of study was changed to three years in length.

After crushing the "Gang of Four", the Xi Nan Traffic and Transportation University underwent many new developments. In 1977, the undergraduate program was restored to four years in length. In 1978, enroliment of research students was restored. Currently, there are four departments, one foundational studies section and 21 specialties.

# DEPARTMENT OF RAILWAY ENGINEERING

Railway Engineering Specialty Railway Engineering Geology Specialty Railway Bridges Specialty Tunnels and Underground Railway Specialty Railway Track Surveying Specialty Industrial and Civil Construction Specialty

### DEPARTMENT OF MACHINERY

Internal Combustion Engine Specialty Railroad Car Specialty Heavy Transport Machinery Specialty Engineering Machinery Specialty Machine Manufacturing Craftsmanship and Facilities Specialty Diesel Engine Vehicle Specialty Metal Materials and Thermal Control Specialty

# DEPARTMENT OF ELECTRIC MOTORS

Electric Vehicle Specialty Railway Electrification Specialty Automation Control Specialty Electronic Computer Technology Specialty

### DEPARTMENT OF RAILWAY TRANSPORT

Railway Transport Specialty

# FOUNDATIONAL STUDIES SECTION

Mathematics Specialty Physics Specialty Applied Mechanics Specialty

In 1980, there were 2864 undergraduate students, 66 vocational students, 73 cadre personnel and 72 research students in attendance. Under the leadership of their instructors, they have had training in basic reasoning, knowledge fundamentals and general abilities. This has produced students with the capability to analyze and solve problems. The school has actively developed the "three good" activities as well as the many types of physical education, arts and recreation activities. The school also frequently organizes student participation in technological activities that fosters an academic atmosphere and elevates the quality of education.

Currently, there is a staff of 2624 personnel. Among them, there are 746 personnel in teaching positions. Among the teachers, there are 28 professors, 66 assistant professors, 451 lecturers, 24 teacher's aides and 127 assistant teachers. There are also 50 teachers who are in transitional or non-categorical status.

The Tang Shan Institute, in the 53 years prior to liberation, produced a total of 1627 graduates. In the 31 years from 1941 to 1980, the Tang Shan Institute has produced a total of 12,300 graduates, as well as 92 research student graduates and 74 foreign exchange student graduates (in the years from 1949-1966 there were 11,000 graduates produced in those 17 years).

The school has presently established two research organizations, one in applied mechanics and railroad electrification, and one in automation. There are a total of 18 laboratories (9 laboratories subordinate to each research section). Specialists actively participating in scientific and technological research occupy 20% of the teaching staff.

In the 31 years since the liveration, the school has made some relatively large developments in scientific research. Aside from the mission of completing scientific research work for the related subordinate ministries of the Chinese Central Committee, the school also receives internatonal joint research articles and, additionally, the school does research work for problems arising in its factories, and on certain questions raised by itself. Research that is successful promotes the develops our nation's railway transport production, and it actively brings about the modernization of our railways.

Research projects that have reached a fairly high level of technology or that have had a significant impact include Professor Meng He's study of Track Surveying Methods and Analysis, Professor Zhang Wan Jiu's study of Stress and Probable Shearing Strength of Concrete, Professor Chan Jian Xiang's determinations on how to provide electricity for China's electric railway systems, as well as several other relatively high level research projects. Professor Sun Fu Sheng's research on "Revisions on the MN1 type Steam Engine's Technology" received the Transportation Award from the Railway Ministry. Professor Wu Bing Hun's studies entitled "Stress Analysis on the Sinking of Columnar Tubing" and "Nonlinear Designs in Test Materials" were both read and exchanged at an international conference. Additionally, in such research areas as modern concrete slab foundations for railways, apparatus for providing electricity automatically to electric railway systems, and aspects in high speed railcar linking, successful results have been obtained. During the course of advancement in our nation's railway modernization, the first internal combustion car was developed, the first electric railroad established, and the first concrete sleeper slabs manufactured-all of thur with the benefit of the students and faculty at Tang Shan Institute. In March of 1978, during the National Science Committee meeting, the Xi Nan Traffic and Transportation University received 15 scientific research awards. At the Si Chuan Provincial Science Committee meeting, 28 research projects received commendation for their successful results.

The Xi Nan Traffic and Transportation University assumes editorial responsibility for a good deal of the teaching material written for industrial and scientific institutions of higher learning in our country. From 1978 to 1980, the following teaching materials used in transportation were written at the school: "Studies in Mechanical Theory", "Materials in Mechanical Sciences", "Studies in Water Mechanics" and "Engineering Charts". The school also assumes responsibility for the mission of editing 37 other teaching publications from other institutions of higher learning. Furthermore, a teachers' organization at the school jointly compiled and edited a "Railway Glossary".

Since 1979, there have been over 50 foreign specialists and lecturers who have come to the Xi Nan Traffic and Transportation University to visit, lecture or participate in research. Among the Chinese specialists who have come to the school, there are Hua Meng Qiu, Wu Wen Ju and Zhang Wei. Foreign specialists have included Gu Liu Wei, Shi Zeng Zhu, Huang Kan, Cheng Xin Yi and Shang Tian Ge Xiong. Also, delegations from the American University Kang Nai Er have been received, as well as delegations from Asia and the Pacific area. In order to strengthen international cooperation and exchanges, the school has signed agreements with the American unversities of Kang Nai Er and the Zuo Zhi Ya Institute of Science and Industry establishing school liaison offices. Furthermore, the school has, on several occasions, sent teachers to the United States, Japan, England and West Germany, as well as other countries to visit, or to participate in technological conferences. Besides this, the school has been host to several outstanding teachers from the United States, France, West Germany and other countries who have come to study, investigate or conduct research.

At present, the Xi Nan Traffic and Transportation University has provided 43 experimental laboratories for conducting scientific research. There is also one electronic computer center and one electrical education classroom. Included among the advanced equipment provided are electronic computers, microammeters, X-ray refractor devices, electron microscopes, thermal analysis instruments, tension devices, atmospheric pressure measurement devices, laser beam generator devices, etc. A color television recording studio, complete with equipment, is in the process of being built. Also under construction are a track surveying lab, a remote sensor lab and a test center for engineering structures.

The school library currently has a collection of over 468,000 publications. Among them are over 100,000 foreign texts. In addition, there are over 2000 different types of Chinese and foreign journals available.

The school manages a machine factory, an electric motor and generator factory and a printing house. They are responsible for producing or processing research instruments and printing matter for the students of the whole school.

The Xi Nan Traffic and Transportation University has established a middle school in the E Mei vicinity (currently with a staff of 90 people and 1266 students in attendance), a child care center (including a nursery with 165 children attending) and, in addition, a 50 bed hospital. The school has established a branch office and a research section in the capital.

They are designated as mid-level vocational offices one and two. Furthermore, the school is in the midst of establishing a correspondence course program and a night university.

Regularly published printed materials include the "Xi Nan Traffic and Transportation University School Paper", the "Xi Nan Traffic and Transportation University Journal", the "School Research", "Essays in Railway Technology" and "Specialized Materials in Railway Technology" publications, etc. Also, along with the Railway Sciences Research Institute and the Xi Nan Research Institute, the school publishes the "Tunnel Engineering" magazine.

The Xi Nan Traffic and Transportation University campus occupies an area of 885 mu. Currently, campus constructed facilities occupy an area in excess of 127,000 square meters.

> Commencement date: May 15th Current School Administrator and Party Secretary: Kan Tu Hua

#### THE CHENG DU TELECOMMUNICATIONS ENGINEERING INSTITUTE

Campus Address: Dong Jiao Construction Road, Cheng Du, Si Chuan Province



The Cheng Du Telecommunications Engineering Institute teaching facility

The Cheng Du Telecommunications Engineering Institute was founded in September, 1956. It was the earliest institution of higher learning for the study of electronic science and technology established in our country.

 $\mathbf{N}$ 

When building the school in 1956, the instructors that formed the foundation for the teaching corps in each specialty came from the Electric Wiring Department of Shanghai Traffic and Transportation University, the Telecommunications Department of Hua Nan Industrial Institute and the Wireless Radio Department of Nan Jing Industrial Institute. Moreover, the original Electric Wiring Department of Shanghai Traffic and Transportation University, the original Telecommunications Department of Hua Nan Industrial Institude, and the original Wireless Radio Department of Nan Jing Industrial Institute had been created during the 1953 institutional reorganization by merging the related specialties from other institutions across the country. As a result, when the Cheng Du Telecommunications Institute's specialties began to grow in teaching strength, it was because they had a good foundation to begin with. During this time, there were four specialties established in Radio Engineering, Electronic Vacuum Technology, Wireless Radio Components

and Insulation Material Manufacturing and Cable Telecommunications Device Manufacture.

In 1958, the specialties of television assembly, multi-channel microwave telecommunications, wireless radio positioners, wireless radio navigation, insulation materials, resistors and capacitors, semi-conductor devices and magnetic materials and components were established.

In 1959, the specialties of wireless radio measurement devices technology, wireless radio telecontrol telemetry, wireless radio mathematics and wireless radio physics were established.

In 1963, the specialties of electronic vacuum machinery and facilities, and wireless radio equipment fabrication, design and craftmanship were established.

In 1971, a specialty in laser technology was established; the program of study was three years in length.

In 1977, the specialties of electronic jamming and computer software were established.

In 1979, there was a reorganization of all the specialties in the school. In order to strengthen studies in the foundational sciences, specialties were once again established in siectronic materials, applied mathematics, physics and chemistry as well as other engineering sciences.

Since 1977, the undergraduate program of study has been four years in length. Since 1978, each department has restored the enrollment of research students. Their program of study has been limited to two and three years in length.

Currently, the school has eight departments established. There are 15 specialties.

DEPARTMENT OF WIRELESS RADIO TECHNOLOGY Wireless Radio Technology Specialty

DEPARTMENT OF ELECTROMAGNETIC FIELD ENGINEERING Electromagnetic Field Engineering Specialty

### DEPARTMENT OF SOLID STATE AND ELECTRONIC MATERIALS

Solid State Component Specialty Electronic Materials Specialty

## DEPARTMENT OF ELECTRIC MACHINERY

Automation and Control Specialty Wireless Radio Specialized Machines and Facilities Specialty Wireless Radio Equipment Fabrication and Design Specialty

DEPARTMENT OF OPTICAL ELECTRONICS TECHNOLOGY

Laser Technology Specialty Vacuum Electronics Technology Specialty

DEPARTMENT OF ELECTRICAL ENGINEERING

Electrical Engineering Specialty

#### DEPARTMENT OF COMPUTERS

Computer Engineering Specialty Computer Sciences Specialty

#### DEPARTMENT OF FOUNDATIONAL THEORY

Physics Specialty Applied Mathematics Specialty Chemistry Specialty

In 1980, there were 2951 undergraduate students and 102 research in attendance at the school.

Currently, the school has a staff of 2951 workers. Among the staff members there are 1057 teachers. Among the teachers, there are 18 professors, 38 assistant professors and 544 lecturers.

After the Cheng Du Telecommunications Engineering Institute was established, it became the most important center for wireless radio science and technological research. The enrollment of research students began in 1957. In the 20 or so years since, there have been hundreds of research problems undertaken. There have been 189 major successes achieved in research. Among them, there are six that received National Science Committee commendations. There were 56 research projects that received provincial, municipal or electronic industries systems technological awards. In the three years from 1978-1980, there were 81 scientific and technological successes. Among them, 62 projects had practical contributions towards the "Four Modernizations" plan.

Scientific research work propagates teaching, the establishment of specialties, and creates a brisk academic atmosphere. It elevates the level of teaching and brings about revisions in the curriculum. In a single two year period, the teachers of the school presented more than 241 essays and, among them, there were a few that received the praise of the international scientific community. Many new specialties were brought about as a result of scientific research work. For example, at the time of the establishment of the laser technology specialty, it generated an enormous amount of research work, and it not only brought about many research successes, but it also produced a cadre of teachers having a technological awareness of the field. The end result has been in obtaining a fairly complete collection of equipment, a comparatively strong staff of teachers and an elevation in the level of education for the specialties.

In the course of 20 odd years of teaching, scientific research and production, there has been a constant development and expansion in the corps of teachers. The specialists and professors' level of technology has been elevated. Many of the teachers produced after the liberation have become the core of strength in teaching and scientific research work. For example, one of the most trusted specialists is an assistant administrator and professor, Shi Li Zhong, and he is also an educator famous throughout the nation. He is responsible for the teaching programs of the entire school. Assistant Administrator, and the chief of the Applied Physics Research Institute, Professor Lin Wei Gan studied abroad when he was young, earning a doctorate in microwave theory, and then he returned to our country where he immediately engaged himself in the work of teaching microwave theory and technology. Additionally, he has presented over 30 research essays, and has received the laudation

of the international scientific community, a National Science Committee award and, in recent years, he has been engaged in research on optical fiber transmission characteristics where he has also been successful. Assistant administrator and Professor Gu De Ren not only has abundant experience in teaching, but has also been actively engaged in research on television component structure where he has also been successful. Professor Chen Hu, the chief of the Department of Wireless Radio Technology, is one of our country's best known specialists in cable telecommunications. In recent years, he has been engaged in research on the design of electronic computer support network systems. These well trusted professors have been engaged in the task of teaching and in the task of research and have continually produced successful results. There is also a group of younger teachers who are just beginning to blossom and are already becoming the backbone of teaching and scientific research work. For example, Professor Kan Sheng Gang who is the chief of the High Energy Electronics Research Institute, was selected nationally as a model worker. In the last 20 years, he has been directly engaged in the task of teaching and researching microwave electronics. In addition, he has presented over 20 essays such as the "Theory of Surrounding Structures" essay which received a National Science Committee commendation. Most recently, in research on rondo-resonant laser radiation theory, successful results have been obtained. He has also produced 21 research students by leading them in their studies.

In order to establish a foundation for the production of research students and scientific research, the school has established an Applied Physics Research Institute, a High Energy Electronics Research Institute and several research centers. Currently, there is a staff of 63 full time research personnel. Publications printed on a regular basis include the "Cheng Du Telecommunications Institute School Paper" and "Collected Essays from Cheng Du Telecommunications Institute".

In the last two years, in order for the school to expand its exchange of science and technology, it has in succession sent 25 outstanding teachers to the United States, England, France, West Germany and Japan, as well as other countries for advanced studies

in institutions of higher learning or at research organizations there. There have been over 30 outstanding teachers who have gone abroad to participate in technological conferences, or to make investigations in technology. Simultaneously, the school has been host to 28 foreign scholars and specialists who have come to lecture. This has led to improvements in the school in teaching and scientific research.

In the 24 years since the school's establishment, the Cheng Du Telecommunications Institute has produced over 12,700 men and women with talents in the electronic sciences technologies. The graduates are distributed throughout the entire nation. They are making their contributions towards the development of our nation's electronics industries.

Presently, the school library has a collection of over 540,000 publications. There are 1036 types of Chinese periodicals available and over 912 types of foreign periodicals available.

The school's laboratories and research centers have been provided with over 5000 types of electronic devices and instruments.

The school has established a machinery factory, an elementary school for our younger brothers, a kindergarten and a health care clinic as affiliated organizations.

The school campus occupies an area of 485 mu and the campus constructed facilities occupy an area of over 180,000 square meters.

Current School Administrator: Wang Jia Gang Party Secretary: Chuang Da Fu

#### CHONG QING CONSTRUCTION ENGINEERING INSTITUTE

Campus Address: Sha Ping Embankment, Chong Qing, Si Chuan Province

In September of 1952, during the national reorganization of institutions of higher learning, the Chong Qing Construction Engineering Institute was founded by the merger of 10 civil engineering and construction departments from the following seven institutions: Chong Qing University, Xi Nan Industrial Vocational College, Chuan Bei University, Chuan Nan Industrial Sciences College, Traffic and Transportation Vocational College, Cheng Du Vocational Arts College and Liu Yi Vocational Sciences College. At that time, the name had been Chong Qing Civil Engineering and Construction Institute. In 1953, the civil engineering departments of Yun Nan University and Gui Zhou University also merged with the school. In 1954, the name was changed to the Chong Qing Construction Engineering Institute.

At the time the institute was being merged together, there were a total of 141 teachers. Among them there were 18 professors, 30 assistant professors, 25 lecturers and 68 assistant teachers. There were 1172 students attending the school. Very few of the 12 departments that merged to form the school were in existence during the struggle for liberation and the National Liberation struggle. Most of them were created within a very short time before the merger and have a relatively short history. For example, the Department of Construction and the Department of Civil Engineering of Chong Qing University were both established in 1929, the Department of Civil Engineering of Yun Nan University was founded in 1916, the Civil Engineering Department of Xi Nan Industrial Vocational College was founded in 1936 and the Construction Department of Cheng Du Vocational Arts College was established in 1940. The majority of students and teachers that came to the school as a result of the merger came from the Departments of Civil Engineering, Construction, Mathematics, Physics, Chemical Engineering, Foreign Languages, Machinery and Electric Motors and Generators. They (the departments) were from the two schools of Chong Qing University and Xi Nan Industrial Vocational College. The students and teachers from these two schools occupied between 70 and 80 percent of the personnel at the new school.

When the Chong Qing Construction Engineering Institute was established, there were two departments in construction and civil engineering organized. There were four specialties in housing construction, industrial and civil structural fabrication, automobile freeway and municipal thoroughfare construction, and industrial and civil construction. Each undergraduate specialty's program of study was four years in length. There were also five vocational programs in Survey Engineering, Construction Design, Structural Building, Building Construction and Prefabricated Housing Construction. Their program of study was two years in length. In addition, there was also a class for college preparations.

In 1953, the Housing Construction Specialty Program was changed to be five years in length. The length of study for the other undergraduate programs remained at four years. In 1954, the Automobile Freeway and Municipal Thoroughfare Specialty was moved to the Cheng Du Industrial Institute, and after the four undergraduate students in the program graduated, student enrollment was stopped in this specialty. In 1955, two specialties in water supply and replenishment and heating, natural gas and ventilation were established. The school managed one vocational class in building construction until 1956. In 1958, the specialty of construction physics was added (it ceased to be administered in 1962). In 1959, three new specialties in building construction, construction materials and products and municipal planning were established. In 1964, the specialties of underground construction, construction machinery and electrical installation were added, but the latter two were dropped in 1965 and 1966. Since 1961, the program of study for the undergraduate specialties has been four years in length, except for the specialty in construction materials and products where the program of study is five years in length. From 1958 to 1965, the school enrolled research students in construction mechanics and construction physics programs.

During the Decade of Turmoil, the school suffered severe losses and was completely destroyed. Student enrollment stopped for more than seven years. In 1971, the school merged with the Chong Qing Communications Institute, and through 1976, there had been five

sessions of students enrolled, for a total of 2970 people. Since 1977, when the nation restored student entrance by examination, the program of study has been restored to four years in length.

Currently, there are seven departments, 13 specialties and five teachers' classes at the school.

# DEPARTMENT OF CONSTRUCTION

Construction Specialty Municipal Planning Specialty

#### DEPARTMENT OF CIVIL ENGINEERING

Industrial and Civil Construction Specialty Underground Construction Engineering Specialty Engineering Geology and Hydrogeology Specialty Teachers' Course in Mechanics Teachers' Course in Drafting

#### DEPARTMENT OF MUNICIPAL CONSTRUCTION ENGINEERING

Heating and Ventilation Specialty Water Supply and Replenishment Engineering Specialty Municipal Gas Heating Engineering Specialty

DEPARTMENT OF CONSTRUCTION MATERIALS ENGINEERING Concrete and Construction Building Products Specialty

DEPARTMENT OF ELECTRIC MOTORS AND GENERATORS

Industrial Electrification and Automation Specialty Mechanized Equipment Installation Specialty Construction Machinery Specialty

DEPARTMENT OF CONSTRUCTION MANAGEMENT ENGINEERING Construction Management Engineering Specialty

### DEPARTMENT OF FOUNDATIONAL STUDIES

Teachers' Mathematics Course Teachers' Physics Course Teachers' English Course

Since 1977, there have been 13 specialties and the science departments have started enrollment of research students in programs of study limited to two, three and four years in length.

In 1980, there were 2761 undergraduate students enrolled in the school and there were 52 research students. The entire school has a staff of 1561 personnel. Among them are 684 teachers. Among the teachers, there are 5 professors, 66 assistant professors, 304 lecturers and 309 teachers' aides and assistant teachers.

The school has also established a correspondence course program and a television university. Additionally, the school has established a cadre training program in Construction Engineering Management that produces the managers and leaders for our nation's construction engineering system.

Prior to the liberation and due to the influence of our party in the Xi Nan region, many of the students from the civil engineering and construction departments of Chong Qing University, the Xi Nan Industrial Vocational College and nine other vocational colleges and universities, as well as the teachers of these students. received varying degrees of encouragement and motivation from the revolutionary doctrine. Chong Qing University, Xi Nan Industrial Vocational College, the nationally established Female Teachers Institute, the Chuan Dong College of Education and eight other institutions united and developed a series of massive demonstrations in the struggle-in 1946, the anti-American detonation movement, in 1947, the antihunger, anti-civil war and anti-persecution movements, in 1949, the struggle for food and clothing, and the struggle for a people's democracy. In all of these movements, the teachers and students from Chong Qing University and Xi Nan Industrial Vocational College played a very active role. Many among them were leaders or organizers in the student movements, and after the liberation, became the nation's construction engineering teachers, specialists, or cadre.

The school, from its beginning in 1952, through the time that it reached full scale in 1957, had created departments primarily oriented towards industrial and civil construction specialties, and with a stabilized body of teachers the quality of teaching was continually elevated.

After 1958, the school conducted a revision in teaching, strengthening the contact with foundational theory, and uniting education with production. A designs section was established, and it was responsible for the design of 233 industrial and civil construction projects, designing a total of 1,180,000 square meters of building space. For example, some of the design projects included the Chong Qing Mountain Yan Zhao Municipal Theatre, an industrial park, and many types and kinds of structures for the Cheng Du Provincial government. During this time period, the work in research at the school also developed and three research centers were established jointly with the Chinese Research Institute for Construction Sciences. The three centers were in construction physics, construction mechanics and construction history. They have conducted research in areas such as thin layered tubular steel concrete reinforcing rods, scaffolding, high temperature gas purification of polluted water and integrated studies useful in other areas of research, as well as in the southern thermal industry, construction acoustics, natural lighting and construction materials. In these areas of research, many obvious accomplishments have been attained.

The school also has a construction research institute with four research centers subordinate to it. They are the Structural Engineering Architecture Research Center, the Research Center for Construction Physics and the Research Centers for Carbon Mechanics and Underground Construction, and Electronic Computer Software. In addition, two research sections for underground cosmic rays and mathematical logic have been established. The Construction Designs Section has been restored. Because the institute fully emphasizes the development of scientific research work, it has brought in a group of accomplished teachers who, on the one hand, are engaged in teaching and on the other hand, are engaged in the conduct of scientific research work. Some of their successful research work

has received the praise of the international scientific community in technological conferences held in Sweden and Japan where they were presented. Among these works are research in underground mountain cave thermal cooling and cold storage plans, steel structures and steel reinforced concrete structures, structural safety, research on aluminum foil plating and its applications, fibre reinforced sand based concrete research and quality control, underground cosmic ray investigations and research on the 400T tower crane. In 1978, three of the research projects received awards at the National Science Committee meeting. In the same year, 23 other successful scientific research projects received awards from the scientific committees of Si Chuan Province and Chong Qing city. In 1978 and 1979, there were 24 teachers recognized for their accomplishments in scientific research by Si Chuan Province and Chong Qing city.

طرم تأم الأم الأم الأم

In recent years, the school has carried out an extensive exchange of technological information with teachers and scholars nationally and internationally. Since 1978, conferences, visits, debates and lectures have been conducted with universities, research organizations, architectural sections and technological professorial delegations from the United States, England, West Germany, Japan, Canada and other countries. The school has also invited foreign instructors to come to the institute to teach foreign languages. These activities have elevated and improved the level of education and scientific research work, and it has strengthened communication and friendship between the school and foreigners.

The school current has 37 laboratories, including a center for precise instrument measurements. Additionally, there is a computer center and an electronic classroom provided for use in teaching and academic activities.

The school library was established from the 6000 plus publications from the original Chong Qing University and Xi Nan Industrial Vocational College libraries. In the course of the last 30 years of improvement and expansion, the facilities and the number of publications have had vast developments. All of the publications and texts in the library are primarily oriented towards civil engineering and construction. Presently, the library has a total of 410,000

publications; among them are 320,000 Chinese publications and nearly 10,000 foreign publications. There are over 30,000 journals of over 1288 types (including subscriptions) and among them are 13,700 journals of 571 types in Chinese and 16,800 foreign journals of 647 types. There are 42 different newspapers available in the library.

The school has established an operational industrial plant, an electronic instrument factory and a measurement instruments repair plant. These plants and factories undertake responsibility for the mission of scientific research and production. In addition, the school has a printing house, responsible for the publication of teaching, lecturing and instructional materials used within the institute.

The school is affiliated with a kindergarten and an elementary school for our younger brothers.

The school campus occupies an area of 564 mu. Campus constructed facilities occupy a surface area in excess of 120,000 square meters. At present, the school is in the midst of constructing a nine-story (13,200 square meters) instructional building.

In the 30 years since the liberation, the Chong Qing Construction Engineering Institute has produced over 9882 men and women talented in the construction professions for our country. They are in the frontlines of socialism's modernization contributing to the building of our socialist nation.

> Commencement Date: October 2 Current School Administrator and Party Secretary: Chuang Yuan Liang

### XI NAN AGRICULTURAL INSTITUTE

# Campus Address: Northern Bei Region, Chong Qing City, Si Chuan Province

The Xi Nan Agricultural Institute was established on September 1, 1950 as a multi-science agricultural institution of higher learning. Currently, it is the only institution of higher learning under the administrative control of the Ministry of Agriculture.

The Xi Nan Agricultural Institute had its beginnings through the merger of the Agricultural Department, Horicultural Department and the Agricultural Production Department of the Si Chuan provincially established Institute of Education, the Agricultural Department of the original Hua Xi University and the Agricultural Department of the privately established Xiang Hui Vocational Institute of Agricultural Skills. At the time of the school's establishment, five departments in agriculture, horticulture, agricultural production, forestry and animal husbandry and veterinary science were created. There were 237 students and 62 instructors. Among the instructors, there were 22 professors, nine assistant professors, six lecturers and 25 assistant teachers. There was a staff of 129 workers.

During the institutional reorganization of 1952-53, the Horticultural Department, the Silkworm Department, the Agricultural Chemistry Department, Infectious Plant Disease Department and the Agricultural Economics Department of Si Chuan University merged with the school; the Horticultural Department, and the Silkworm Department of Yun Nan University merged with the school; the Infectious Plant Disease Department, the Agricultural Economics Department and the Agricultural Chemistry Department of Gui Zhou University merged with the school. Also merging with the school were the Agricultural Economics Department of Chuan Bei University, the Silkworm Section of the Yue Mountain Vocational Sciences School the Agricultural Section and the Horticultural Section of the Xi Mao Vocational Sciences School, and the Tea Leaf Section of the Xi Nan Trade Specialty School, for a total of 15 altogether. The production section of the Agricultural Production Department was sent to Si Chuan Chemical and Industrial Institute, and the Animal Husbandry and

Veterinary Sciences Department and the Forestry Department were sent to the Agricultural Institute of Si Chuan University. After the reorganization, the Xi Nan Agricultural Institute created six departments with six specialties. They were: the Agricultural Department with a specialty in agriculture, the Horticultural Department with a specialty in fruit trees and vegetables, the Soil Agrichemistry Department with a specialty in soil agri-chemistry, the Plant Protection Department with a specialty in plant protection, the Silkworm Department with a specialty in silkworms, and the Agricultural Economics Department with a specialty in agricultural economics and enterprise organization. There were 650 students in attendance, 170 personnel in teaching positions (among them were 58 professors and assistant professors, 23 lecturers and 89 assistant teachers) and a staff of 212 workers.

The enrollment of research students in soil studies, biochemistry and cotton-made products began in 1956.

From 1958 to 1960, the Department of Agricultural Mechanization with a specialty in agricultural mechanization, the Department of Animal Husbandry with a specialty in animal husbandry and three advanced study courses in tea leaves, silkworms and agricultural machinery were added as well as an agricultural cadre training course. The number of students attending the school increased to 2519.

In 1963, based on the Chinese Central Committee's directive to reorganize, solidify, replenish and elevate, a reorganization was conducted. Seven departments with seven specialties were saved. They were the Agriculture Department with a specialty in agriculture, the Horticulture Department with a specialty in fruit trees and vegetables, the Soil Agri-chemistry Department with a specialty in soil agri-chemistry, the Plant Protection Department with a specialty in plant protection, the Agricultural Production Mechanization Department with a specialty in agricultural production mechanization, the Silkworm Department with a specialty in silkworms and the Agricultural Economics Department with a specialty in agricultural economics and enterprise organization.

In 1964, the enrollment of research students was restored. By 1965, the school had 1904 students in attendance. There was a staff of 849 personnel at the school, and among them, there 352 people in teaching positions (among the teachers were 38 professors and assitant professors, 79 lecturers and 235 assistant teachers). Teaching at that time was the famous soil specialist, Wu Guang Jiong, who was selected as a member of the Academic Committee of the Chinese Academy of Science.

After 1966 and during the Decade of Turmoil, the school was completely destroyed. Student enrollment stopped for more than eight years.

In 1974, student enrollment was restored. At the same time, specialties in tea leaves and animal husbandry and veterinary science were restored. In addition, the specialty of fruit trees and vegetables was split into two specialties, one in fruit trees and one in vegetables.

In 1974, after student enrollment was restored, the programs of study were frequency changed. There were one, two and three year programs of study. In 1978, the undergraduate program of study was restored to four years. Once again the enrollment of research students was restored. Their program of study was three years in length. Simultaneously, to strengthen studies in foundational sciences, the number of foreign languages available was expanded. The school established English, Japanese and Russian languages and, in addition, an advanced specialty in English was established. Emphasis was placed on the building and equipping of laboratories for foundational studies and the quality of teaching in the foundational studies gradually improved.

Currently, the school has seven departments with 10 specialties.

### DEPARTMENT OF AGRICULTURE

Agriculture Specialty Animal Husbandry and Veterinary Science Specialty

### DEPARTMENT OF HORTICULTURE

Fruit Tree Specialty Vegetable Specialty Tea Leaf Specialty

.

DEPARTMENT OF PLANT PROTECTION

Plant Protection Specialty

DEPARTMENT OF SOIL AGRI-CHEMISTRY

Soil Agri-chemistry Specialty

DEPARTMENT OF SILKWORMS

Silkworm Specialty

DEPARTMENT OF AGRICULTURAL ECONOMICS Agricultural Economics and Management Specialty

DEPARTMENT OF AGRICULTURE MECHANIZATION

Agricultural Production Mechanization Specialty

In 1980, there were 2529 undergraduate students in attendance, there were 10 research students and 41 advanced studies students. In addition, there were over 540 personnel trained in various types of short training courses.

The school has a staff of 1342 personnel. There are 462 personnel in teaching positions and among them are 19 professors, 28 assistant professors, 227 lecturers, 33 teacher's aides and 155 assistant teachers.

The school has established a soil fertility research center, an insectology research center, a silkworm genetic breeding research center, a cotton plant research center, a fruit tree research center and an isotope research center. They are responsible to the Ministry of Agriculture, the Ministry of Education, the province and the city for major research projects. These research centers are supplied with everything needed and their primary task is to produce better quality students.



Xi Nan Agricultural Institute Administrator Professor Kan Ming Zhao inspecting research work on cotton plants.

Since the Xi Nan Agricultural Institute has been built, based on incomplete statistics, it has produced a total of over 1128 research articles. From 1972 to 1979, there were 62 successful research projects presented, and among those since 1978, there were 29 that received municipal, provincial and national science committee There have been 11 successful research projects since 1979 awards. that have received provincial or municipal awards. For example, the research on highly fragrant crushed black tea industry improvements in production arts, which have had major revisions; the natural fragrance is clearly marketable as was tested in a city store. and in test sales to the United States and The Netherlands, it was warmly welcomed on the market. Already, on the American and Euro~ pean free markets, it is selling well. Summer and fall silk products of "dong zhong x wu 7 su" (translator's note: unknown, probably name of a variety of silk produced in the eastern region), under high temperature conditions have a high degree of resistance of the heat, a better quality and in contrast to the common variety of silk produced, will produce 50-100 feet more, and has reached the 3A60 level in filature. It is very suitable for production in the hot seasons in Chong Qing and Si Chuan during the summer and fall.

The teachers of the Xi Nan Agricultural Institute are very diligent and conscientious in their work. In their teaching, the last 30 years are as a day. They are very disciplined in their research work, have a profound degree of knowledge and have the courage to establish new ideas.

The soil specialist Professor Wu Guang Jiong, in aspects of his biothermal soil fertility theory, has independently resolved many problems in research. In addition, he has gone to Hungary, Romania and to Nan Jing three times to serve as Chairman of the International Soil Studies Conferences, where he has presented his theory. In the last 30 years, under his leadership and guidance, many teachers have been produced to serve as a core or backbone in successful studies, such as those in soil geography, soil investigations and agricultural regional planning, soil analysis and soil improvement programs, where many successes have been made one after the other.

Professor Jiang Shu Nan, in regards to insect taxicology, has completed some very thorough and extensive studies. In recent years, he has written the volume on the Impact of Insects on the Chinese Economy, which is the third volume, and is in the process of writing on his discovery of 24 types of longhorn beetle. He is currently engaged in the classification research work for these beetles. Additionally, in cooperation with foreign scholars, he has developed research on blood insects.

Professor Jiang Tong Qing, long engaged in silkworm genetic breeding, has been doing research work in collection of products from their source, and in its preservation, and has met with considerable success in his work. In recent years, in regards to his research on silkworm egg genetics and in his work on silkworm heredity, he has made some major discoveries.

In recent years, on one hand, the Xi Nan Agricultural Institute has asked foreign specialists to come to the school and lecture or participate in research studies, and on the other hand, the school has sent its instructors to foreign nations, such as Yugoslavia, to participate in advanced studies. The school has sent the Institute Administrator, Kan Ming Zhao, to the United States to visit and conduct investigations as part of the Chinese Advanced Agricultural Education Delegation, Professor Jiang Tong Qing visited Japan as a delegate from the Chinese Si Chuan Silkworm Delegation, and teachers have been sent to the four countries of The Netherlands, United States, Mozambique and Cameroon to lecture or teach in their specialties. Simultaneously, professors and specialists from the United States, Japan, Australia, Luxembourg and other international relations delegations have been invited to come to the institute and visit, lecture or participate in research. Also, teachers have been sent outside the school to participate in every type of technological exchange activity. These types of activities improve international relations with the school and foreign scholars, elevate the quality of teaching, develop scientific research, enliven the academic atmosphere and, as well, produce a better quality of teacher for the institute's improvement.

At present, the entire school has 47 experimental laboratories equipped with a 50,000x electron microscope, research microscopes, including every type of low and high power magnification microscope, dual beam atomic absorption spectrometers, an ultra violet (751) lumino-spectrometer, man-made meteorologic chambers, liquid scintillation counters, hexagonal strainometers, every type and kind of polarograph, closed circuit television systems and recording equipment as well as other instruments and equipment provided for scientific research use. Currently, the school is in the midst of constructing a 9000 square meter experimental laboratory to be used for teaching purposes, research and the development of technology under much improved conditions.

The school library currently has a collection of over 340,000 publications (among them over 120,000 foreign) and there are 1029 types of Chinese journals and 556 types of foreign journals. The collection of texts at the library consist mainly of books in agricultural and biological sciences, with almost every field in the agricultural sciences in its collection. The collection of foreign texts in the library is relatively complete, and there are 10 specialties that have a complete collection of major foreign publications and journals from the 50's, 60's and 70's. In its endeavors to expand the international exchange of publications, the school continues to replenish its shelves with foreign publications from related universities.



Xi Nan Agricultural Institute teachers and students of the vegetable specialty inspecting growing conditions for melons

In 1959, the library, along with the United Nations Agricultural Foodstuffs Organization, established relations and it has developed solid relations with the library of the Agricultural Foodstuffs Organization through this contact.

The school occupies a total area of 2700 mu. Currently, campus constructed facilities occupy a surface area of 84,000 square meters.

The school has six repair shops and an experimental farm that occupies an area of 1051 mu, silkworm lands and tea gardens occupy 65 mu, and there is an orchard that occupies 276 mu. The experimental farm and training factories are provided to improve learning conditions. They were completely destroyed during the Decade of Turmoil and are currently in the midst of being speedily restored to allow the school to better accomplish its teaching and research mission.

In the last 30 years, the school has produced 8826 men and women talented in advanced agricultural sciences, 649 correspondence course students, and in addition, the school has conducted every type of short training class, producing over 41,395 students. They are the cadre of our nation's agricultural teaching, research, management and production enterprises throughout every area of the country. Some of them have made very large contributions in their work, such as a research member of the Hu Nan Province Agricultural Institute named Ge Jiang Ping (a graduate of the Agriculture Department in 1953) who has made breakthroughs in three different hybrid rice systems, large surface area production and is a leading expert in hybrid rice for our country and the world.

The teachers, students and workers of Xi Nan Agricultural Institute have for many years promoted an excellent school spirit of "plain and simple living, diligence and hard work in studies", and now they are excitedly giving their utmost to make contributions towards the revolution in establishment of socialism in our country.

> Commencement date: September 1 Current School Administrator: Kan Ming Zhao Party Secretary: Li Lan

10.1

### SI CHUAN MEDICAL INSTITUTE

Campus address: Cheng Du City, Si Chuan Province

The precursory organization to the Si Chuan Medical Institute was the "Privately Established Hua Xi Cooperative University". At present, the school has over 70 years of history.

The former "Privately Established Hua Xi Cooperative University" (abbreviated as the Hua Xi University) was founded through the four allied teaching committees of the three countries of the United States, England and Canada. In 1905, construction work began and on March 11, 1910, the school was officially established. At that time, there were three branches established in literature, science and education. There were 11 students and eight teachers. In 1913, a medical branch was established. In 1914, a branch in dentistry was established. In 1933, the branches became departments, and three institutes in literature, science and medicine were established. In the Institute of Science, the Department of Pharmaceutics was established. The school gradually developed to become a university integrated with four institutes in literature, science, medicine and dentistry. The Institute of Literature established the Department of Chinese Literature, the Department of Foreign Languages and Literature, the Department of Education, the Department of Rural Construction, the Department of Social Sciences, the Department of Economics, the Department of Philosophy and History, the Department of Music and the Department of Art; the Institute of Science established the Department of Mathematics, the Department of Physics, the Department of Chemistry, the Department of Biological Sciences, the Department of Pharmaceutics, the Department of Agricultural Arts, the Department of Domestic Government and a section in Advanced Agricultural Enterprises; the Institute of Medicine established the Department of Internal Medicine, the Department of Surgery, the Department of Obstetrics and Gynaecological Sciences, the Department of Pediatrics, the Department of Sensory Organs, the Department of Nursing and an advanced vocational course in medical examinations; the Institute of Dentistry established the Department of Orthodontics, the Department of Dental Surgery, the Department of Periodon-

tics and the Department of Oral Diseases as well as the Department of Psychosomatic Illnesses. The Institute of Medicine and the Institute of Dentistry were also jointly affiliated with the Hua Xi Medical Institute, the Ren Ji Medical School for Men, the Ren Ji Medical School for Women, the Medical Institute of the Five Sensory Organs, the Institute of Neurological Diseases and a leprosy hospital. Altogether, there were a total of 359 hospital beds. In the Institute of Literature and the Institute of Science the program of study was four years in length and in the Institute of Medicine and the Institute of Dentistry, the program of study was seven years in length (there were two years of preparatory courses and five years of discipline studies). Since 1922, the school has awarded the degrees of Bachelor of Arts, Doctorate of Medicine and Doctorate of Dentistry. The dental and medical institutes of the university occupy the most prominent position.



A view of the Si Chuan Medical Institute teaching building

On the eve of liberation, the university proper had a staff of 392 workers and teachers (this does not include over 400 personnel in the affiliated and auxiliary organizations), and there were 1415 students in attendance. In the 40 years of the school there have been a total of 2197 graduates. Among them, there were 808 graduates of the medical, dental or pharmaceutics departments. They are now distributed over every part of the country, the Far East and the United States, England and Canada, as well as several other nations.

This university is the first institution of our country that has the distinction of having both a medical institute and a dental institute. In regards to study and dissemination of foreign advanced scientific technology, it has since its founding promoted the exchange of culture with foreign countries for definite purposes.

In the 40 years prior to its liberation, the Hua Xi University's advancements in struggles such as the anti-imperialist patriots struggle, the struggle to oppose the suppressive rule of the Nationalists Party agents, and the struggle to obtain freedom for the people are quite obvious. On September 5, 1926, after the Wan County Massacre which was caused by English naval warships bombarding Wan County of Si Chuan Province, a massive movement to drop out of school and oppose the imperialists was initiated, and it caused the schools to be unable to grasp the patriotic students and promote their needs. During the time of the second civil revolutionary war, the thoughts of a people's democracy were proliferating and an underground communist party organization was established. Under the leadership of the party, the student movements in the struggle advanced and developed even further. During the time of the War of Resistance Against Japan, the Pei Jing University of Bei Jing, the Medical Institute of Nan Jing's Central University and Qi Lu University of Qi Nan, all of the schools' students came in succession to Hua Xi University to unite and manage the school while promoting an uprising in the form of a movement to resist Japan and save the country. In 1942, under the leadership of the Communist Party, a Progressive Revolutionary Youth Organization was established (abbreviated as the Youth League) and it brought in a surge of support in the uprising to resist Japan. After victory in the War of Resistance Against Japan, the students and teachers of Hua Xi University actively participated in the anticivil war, anti-hunger and anti-persecution movements. For example, in 1947 during the "student aid" movement, and in 1948 the "April 9th blood letting". On the eve of Cheng Du's liberation, the school started a valiant struggle to protect the university.

In December of 1949, the city of Cheng Du was liberated and this school began to make some earth-shaking changes.

On October 6, 1951, the People's Government took into receivership the university and changed it to become the National Established

People's Hua Xi University. A member of the Academic Committee of the Chinese Academy of Science, the famous biological sciences scholar, Kan Cheng Pi, was appointed administrator of the university.

In 1952, during the time that the national reorganization of institutions of higher learning was taking place, the majority of the Hua Xi University's Institute of Literature and Institute of Science merged with Si Chuan University and the Xi Nan Teacher's Institute, as well as Si Chuan Teacher's Institute. The Department of Economics was reorganized to become a part of the Si Chuan Institute of Finance and, at the same time, the Medical Institute of Chong Qing University was reorganized into Hua Xi University. Four departments were established in medicine, dentistry, health and pharmaceutics. Attached to the school was an integrated auxiliary hospital. The program of study for the Department of Medicine, the Department of Dentistry and the Department of Health was changed to five years in length, and the program of study for the Department of Pharmaceutics was changed to four years in length. Since that time, the university has changed to become a modern medical sciences university for the Xi Nan region, and it is subordinate to the Ministry of Health for organizational purposes.

(EEE

In 1954, the enrollment of research students was restored. In 1955, part of the teachers and students of the Department of Health of Zhe Jiang Medical Institute (now the Zhe Jiang University of Medical Science) and a portion of the teachers and students of its Department of Pharmaceutics, as well as part of the teachers and students of the Department of Pharmaceutics and the Department of Health of Shan Dong Medical Institute merged with the Si Chuan Medical Institute to advance a step further and replenish the strength of the school in comparison to its past foundations. In 1958, a new pharmaceutics plant was established and managed by the school. In 1960, a Department of Pediatrics was added, a specialty in nuclear medicine was established and so were specialties in chemistry and biology. The number of students in attendance at the school had reached 3575 and the number of personnel in teaching positions at the school had reached 632. Among the teachers, there were 23 professors, 33 assistant professors and 178 lecturers and physicians. The school had a full time authorized strength of 1162 administrative personnel. In 1961, the party directive of "reorganize, solidity,

replenish and elevate" was implemented and the newly established specialties were abolished. The school amassed its strength, and re-established the original four specialties. In addition, since 1962, the program of study for the medical, dental and health specialties has been six years in length. The program of study for the parmaceutics specialty was changed to five years in length. This has led to a strengthening in the quality of teaching and has proved to be very helpful in elevating the academic level of education.

During the Decade of Turmoil from 1966 to 1976, the school was destroyed and the majority of the cadre and educated were brutally murdered or persecuted. The school stopped enrollment of students for more than six years. From 1972 to 1976, there were five sessions of students enrolled in a three-year program of study. The quality of education at the school had a drastic decrease.

After crushing the Gang of Four, the directives of the llth session of the National Committee's third plenum were implemented in the spirit of "reorganize, rectify, revise and elevate" and the school's teaching, research and medical care gradually returned to the right track. Since 1977, undergraduate students have been enrolled in a five-year program of study. In 1978, the enrollment of research students was restored and they are enrolled in one of three types of two, three or four year programs. At the same time, the Si Chuan Medical Institute returned to the administrative control of the Ministry of Health.

The Si Chuan Medical Institute has accumulated an abundant amount of experience in the long time that the school has been managed. The school has a spirit that is serious and diligent and conscientious, the atmosphere of academia is dense and some of the outstanding distinctive features of the school are: a long established school history, a comparatively large scale institution and the school is well equipped and has a solid foundation.

Currently, the Si Chuan Medical Institute has four departments with six specialties.

#### DEPARTMENT OF MEDICINE

Medical Science Specialty (temporarily conducting a medical jurisprudence class)

#### DEPARTMENT OF DENTISTRY

Dentistry Specialty

#### DEPARTMENT OF HEALTH SCIENCES

Hygiene Specialty Health Examination Specialty

### DEPARTMENT OF PHARMACEUTICS

Pharmaceutics Specialty Chemical Pharmaceutics Specialty

Since 1981, the program of study for the Department of Medicine, the Department of Dentistry and the Hygiene Specialty of the Department of Health has been restored to six years in length. The other specialty programs were restored to five years in length. In addition, a section for teaching foundational curriculum courses was established.

Furthermore, the school has established affiliation with a middle level health sciences school and has established a class for nursing and clinical experimentation technology. The programs of study are three years in length.

In 1980, there were 2550 undergraduate students in attendance at the school and, in addition, there were 103 research students in attendance. The number of staff workers and teachers had developed from 700 at the time of the liberation to over 4200. Among the staff, there were 1150 teachers (including 45 professors, 114 assistant professors and 444 lecturers, physicians and engineers, as well as 547 assistant teachers and medical science instructors). This is 2.6 times the number prior to liberation. A portion of the lecturers and upper level instructors have already gone abroad to



Students of Si Chuan Medical Institute working under a shadowless lamp

investigate, lecture or for advanced studies. Some of them, when they were young, had earned doctorate degrees in medicine and dentistry.

In the 30 years since the liberation, the university has produced 12,916 graduates for the country which is 17 times the number of graduates produced in the 40 years prior to the liberation. Before 1966, the school had produced 69 three-year program research students. Besides this, the school has trained more than 6000 advanced studies students (including instructor training vocational courses). In order to further develop our nation's medical, health and pharmaceutical enterprises, and to protect the people's health, the Si Chuan Medical Institute and its graduates have actively made many contributions. Some of the international and national scholars at the school include: the biological sciences scholar educated in the United States at New York State University, Mr. Gao Jiang Tian, the plastic surgeon, Chuang Yu Ji, optometrist Mao Wen Shu, orthopedists Xie Yang Zhu and Wang Gui Sheng, internal medicine specialist Wu De Sheng, exodontic surgeon Zhang Yang Jiang, prosthodontist Chen Hua and oral surgeon Mo Xi Ji, all of whom are professors.

At present, the school has 50 instructional research laboratories and in addition, it has established corresponding experimental laboratories. Besides this, it has also established an independent experimental research center, an electron microscope research laboratory and a nuclear medicine laboratory. In each of these laboratories are provided every type of medically used optical microscope, electronic microscopes, isotope scanners, various spectrometers and other related equipment, all of which is provided to be used in instructional and research work. There is also a well equipped color video recording studio that is used to suit visual aided instructional purposes.

The Si Chuan Medical Institute is situated on the edge of the Shi River in the southern suburbs of Cheng Du City and is located beside the beautiful and fertile Hua Xi embankment. In the center of the school's campus is a display building. The entire campus occupies an area of over 900 mu and, corrently, the campus constructed facilities occupy a surface area in excess of 260,000 square meters. During the past few years, the school has continued to construct new educational and experimental buildings. On the campus are flowers, trees and shrubbery; the scenery is breathtaking. The climate is favorable and it is a well suited area for education and research.

The Si Chuan Medical Institute library was completed in 1926. Presently, there is a main library and branch libraries. The collection of books totals nearly 600,000 volumes and among them are over 380,000 volumes of foreign texts and also provided are 1600 types of Chinese and foreign periodicals. In addition, there is a professional micrographics room where rare materials may be reproduced or copied. In 1978, the National Medical Sciences Library Committee cited the library as a medical and pharmaceutical resource center for the Xi Nan region. Currently, the school is in the midst of constructing a new, four-story main library. Inside the library, every type of student reading room and specialized instructor reviewing room is being established. After completion of the new library, it will improve the conditions of study for both students and instructors and will help to elevate the level of academic activities.

The Si Chuan Medical Institute heavily emphasizes training its teachers and the teaching strength at the school is comparatively strong. In the basic medical science course and in medically related courses, some of the better known professors include: the biochemist Lan Tian Niao, structural embryologist Ji Zhan Shan, pathologist Chen Tie Cun, autopsy specialist Wang Yong Che, internal medicine

and infectious disease specialists Geng Zhong Liang, Zhang Guang Yu, hematologist Guan Chang An, circulatory disease specialist Wu De Sheng, urologist Guan Xian Zhao, brain surgeon Wu He Guang, chest surgeons Yang Zhan Hua and Yang Jing Hua, orthopedist You Huai Xin, liver and gall bladder surgeon Fou Ren Tu, obstetrics and gyneacologist Qi Yi Cheng, pediatricians Tu Xun De and Zhang Qun Lei, neuropathologist Kan Jing Yong, ontolaryngologist Ge Gu Ren and optometrist Fei Zun. In areas of dentistry, there are the oral surgeons Fan Cao Re, Wang Xun Li, Ji Gong Chi, exodontists Wang Fang Zhang, Lian Ren Hua and Wang Mo Dang (an assistant professor), prosthodontists Gui Zhi Tong, Zhang Jing Shan and Chen An Zhu (an assistant professor), and orthodontist Zan Zhi Yi. In the field of health sciences, there are the hygienist Chen Shi Ti, the occupational labor health specialist Yan Cheng Lie, health nutritionist Ge Ru Sheng, epidemiologist assistant professor Lan Zhu Mo, and environmental health specialist Guo Ji Tong. In the field of pharmaceutics, there are the biochemical pharmacologist Li Zheng Hua, analytical chemist Fou Cao Duan, plant chemist Wang Xin Ti and Chinese herbal medicine specialist Xie Cheng Ke.

The Si Chuan Medical Institute heavily stresses uniting theory with practical experience. Medicine is a science that heavily stresses the utilization of practical experience. At the same time that the Si Chuan Medical Institute strengthens its teaching in foundational theory, it also fully emphasizes the application of practical experience. In recent years, on the one hand, the institute has replenished each of the laboratories with every kind of apparatus in order to strengthen education in experimentation, and on the other hand, it has actively developed basic clinical studies. At present, the school has established affiliation with three hospitals and one pharmaceutics plant. After the liberation, the school built a medical outpatient section and a medical inpatient section. There is a hospital for dental and occupational illnesses and the number of hospital beds has increased from 359 before liberation to 1280 at present. The beds are distributed as follows: in the medical institute hospital there are 1050 beds, in the dental hospital there are 100 beds, in the occupational illnesses hospital

there are 130 beds. In the Dental Institute, there are 120 dentist chairs. The pharmaceutics plant has five shops for vaccines, pills, Chinese herbal medicine, cultivated medicines and naturally-found medicines. In teaching, the school rigorously follows the "three basics" (basic theory, basic knowledge and basic ability), the "three stricts" (strict attitude, strict requirements and strict adherence to policy) in its requirements for turning out students. The quality of teaching is constantly rising.

The Department of Dentistry at the Si Chuan Medical Institute enjoys a very favorable reputation nationally and internationally. It was the earliest center of education for dentistry in China and was the originator of dental science specialties and periodicals in our country. Prior to the liberation, the school not only enrolled students from China, but also students from Korea, Russia, Hungary, Java and other countries. Our international comrade from Canada, the former Assistant Chairman of the World Peace Organization, Mr. Wen Tu Zhang, once stated: "It goes without saying that the science of dentistry has gained prestige throughout the world, let alone China itself". After the liberation, work in teaching, scientific research and treatment in the field of dentistry underwent significant advancements and developments. The dental school became a work center for the teaching and scientific research work for the whole country. The school produced many excellent dental professors, research personnel and dental sciences instructors for the country. In order to establish and develop the enterprise of dentistry in our socialist country, they have made many significant contributions.

The Si Chuan Medical Institute heavily stresses scientific research work. Not long after the school was established, it established a scientific research section which had a total of nine research centers and a museum. The published materials they produced were of over 10 different kinds. After the liberation, under the administration of the first institute administrator, a member of the Academic Committee of the Chinese Academy of Sciences, Professor Kan Cheng Zhao, work in teaching and research underwent a supersonic restoration and development. In the 30 years since, the school has assumed responsibility for the mission of completing 54 national

720

research projects. More than 2466 essays have been published and 111 research articles have received national, ministry, provincial and municipal awards. Among them are research articles such as investigative studies on the amphibian class animals of Chinese wildlife refuges, blood infiltrating hookworms, helminthic infection sources of fasciolopic buski, treatment of parasitic loranthus parasiticus, clinical and pharmaceutical treatment in split brain research, the advancements made in the new synthetic type "53" contraceptive, clinical and pharmaceutical applications in shigella alkalescens dispar group, laser optics treatment devices, protective lacquers for the treatment of dental caries and gamma ray cameras. All of the successful research projects above have reached relatively high levels of technology. At present, there are three research institutes established and there the following 10 research centers in: taxonomy, immunology, leptospirosis, neurology, disorders of the nervous system, liver and gall bladder diseases, health perils, pneumoconiosis, Chinese medicine and temperate zone disease theory, and bio-engineering. They assume responsibility for the mission of research for the related ministries and departments of the nation. In addition, these centers also conduct joint research operations with other research units and teachers of related organizations. The school publishes the "Si Chuan Medical Institute School Paper" and since its beginning, the paper has gradually extended its circulation. Since 1981, it has been distributed internationally.

The Si Chuan Medical Institute places extraordinary emphasis on the improvement of technology for treatment, and on the quality of its pharmaceutics. Students and teachers, in the majority of their treatment activities (in the last 30 years, they have seen more than 14,000,000 outpatients, and more than 370,000 inpatients) endeavor to hone their professional skills, to actively develop new methods of treatment, create new technologies and new industries. Results for treatment in artificial liver, kidney, bone, joint and marrow organ transplants have been very effective. The pharmaceutics plant, aside from its mission of product testing, also supports a large quantity of drug production. It actively test manufactures many very effective, high quality pharmaceutics, such as insulin vaccines, eyedrops, liver blood sugars, etc. There have been test sales of five different products in Japan, southeast Asia and Africa.

The Si Chuan Medical Institute emphasizes the exchange of academic technology. Priot to the liberation, there were many foreign teachers and scholars invited to the school to teach, lecture or participate in scientific research, and this proved to be very useful in propagating the most advanced scientific technologies. During the time of the War of Resistance Against Japan, several of the schools of Tong Hua and eastern Hua Bei, jointly managed a school for over eight years. The school attracted many of the well known professors and scholars of the country. Thev established the Hua Xi University, the Central University and Ji Lu University and Medical Institute, where they actively promoted the development of exchange activities. In recent years, the school has sent outstanding professors to the United States, England, France, Canada, Japan, Sweden, Denmark, Australia, Thailand and The Phillipines to study, investigate, lecture or participate in research activities at universities and research organizations, or to participate in technical conferences. At present, there are 24 personnel abroad, and there are 27 more preparing to go. Simultaneously, personnel from the United States, England, Germany, Japan, Yugoslavia and 10 other countries, representing universities, research organizations, academic delegations, teaching committees and the health ministries, have come to the school to visit or lecture. During the period from 1979-1980, over 1000 guests were received. This year, the school invited the head of the Cardiopulmonary Research Center at the American University Xiu Qi Dun, Professor Huang Huan Chang, to deliver a speech. Many Canadian universities and organizations have established international relations with the school. These activities cannot but strengthen and improve the exchange of academic technology and increase cooperation. They promote profound developments in research work for medicine.

Based on the requirement for this discourse to be short, we have expounded on the major assets of the school, but the Si Chuan Medical Institute has also added specialties in chemistry of Chinese herbal medicine and bio-engineering medicine. These have brought about an expansion and strengthening of the education for the research students. Developments in treatment technology, a solidification of Sino-western medicines, and establishment of affiliated

hospitals have occurred. Alliances with the Cheng Du University of Science and Technology and other adjacent universities have been strengthened, and this has especially elevated foundational studies in mathematics, science, chemistry, biology and immunology, as well as teaching and research in these areas. It has also improved developments in medicine and pharmacology.

Commencement date: October 6 Current school administrator: Ma Qi Zhi Party secretary: Zhong Jie Yi

XI NAN INSTITUTE OF POLITICAL SCIENCE AND LAW Sha Ping Embankment Region, Chong Qing City, Xi Nan Province

In 1953, the Xi Nan Institute of Political Science and Law was created by taking the Political Science and Law Department of the People's Revolutionary University in Xi Nan and using it as a foundation. Then, the government and law departments of the five institutions of Si Chuan University, Yun Nan University, Gui Zhou University, Chong Qing University and the privately established Chong Qing Finance Institute were merged with the school.

During the initial stages of the institute's establishment, a two-year specialized program was established and the Xi Nan region's organizational cadre in the fields of government and law were trained in rotation. In 1959, the enrollment of undergraduate students in a four-year program began and, in addition, the enrollment of twoyear specialty students stopped. By 1957, the school had already produced 868 graduates in the specialty program, and it had trained in rotation over 700 government and law organizational cadre. There were 842 undergraduate students in the school, the number of teachers had reached 191 and among the teachers there were 17 professors and assistant professors, 30 lecturers, 122 assistant teachers and 22 teacher's aides.

In 1958, the "Chong Qing Institute of Law" and the "Si Chuan Provincial Government Cadre Training School" were abolished. They were merged with the Xi Nan Institute of Political Science and Law.

In February of 1959, the Chong Qing Branch School of the Chinese People's Public Security Institute was merged with the Xi Nan Institute of Political Science and Law. The name was "Si Chuan Political Science, Law and Public Security Institute". A cadre training branch was established and three departments were made subordinate to the institute. They were the Department of Security, the Department of Civil Order and the Department of Political Science and Law.

In August of 1960, the school became an administrative institute of Si Chuan and the name "Si Chuan Political Science, Law and Public Security Institute" was retained. The institute established four departments and one section. They were the Department of Political Science and Law, the Department of Government Administration, the Department of Government, the Department of Government Education and the Cadre Training Section. During this time, the school expanded on a comparatively large scale. The number of undergraduate students and organizational cadre in training was nearly 3000 and the teaching corps had grown to over 200 personnel.

In May of 1964, the name of the institute was changed, the original name of Xi Nan Institute of Political Science and Law was restored. By 1965, the Xi Nan Institute of Political Science and Law had become an institution on a scale equal to that of a university. The school occupied an area of 560 mu, and campus constructed facilities occupied an area of nearly 90,000 square meters. There were 194 instructors, and over 1200 students in attendance. There was a library provided with over 340,000 publications.

During the Decade of Turmoil, the school was abolished, the teachers were moved out, the campus facilities were occupied, the library materials and other equipment were seriously damaged.

In May of 1977, when the Decade of Turmoil ended, the Xi Nan Institute of Political Science and Law was restored. In the fall of 1978 student enrollment began. Currently, the institute has established two specialties. They are in law and criminal investigations.

In 1980, there were 1454 undergraduate students in attendance. The law specialty's program of study was three years in length,

and there were 13 research students enrolled. The total number of staff members and teachers was over 600, and among them were 224 instructors. Among the instructors were three professors, five assistant professors, 97 lecturers, 26 assistant teachers and 93 teacher's aides.

The institute library has already restored its collection of publications to over 326,000 volumes. The area occupied by the school has been reduced to 261 mu, and campus constructed facilities occupy a total surface area of 35,000 square meters.

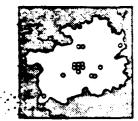
Since the Xi Nan Institute of Political Science and Law has been established, teaching and academic research activities have undergone constant development. In the first half of the year 1955, an academic committee was founded, and a little later, the school paper was created. After the school was restored in 1978, it fervently developed academic research activities. In the last three years, it has already written and published new teaching materials of 19 types in 26 volumes. Teaching materials and draft proposals of 24 forms in 34 volumes have been written. Some of the teachers and lecturers have participated in the work of writing the national "A Complete Text of Hundreds of Sciences" and the "A Glossary of Law" publications, as well as working on resolutions for the National Organization of the Committee on Civil Regulations. They are also responsible to the Ministry of Criminal Law and the Ministry of Education for the teaching materials used in institutions of higher learning that teach law and government under their jurisdiction, such as the texts "Theories in Economic Revision", "Studies in Medical Law", "Language Teaching Curriculum", "A Study of Criminal Investigations", "Theory in Law", "Studies in Constitutional Law", "Studies in Criminal Law", "Teaching Curricula for Criminal Lawsuits", "Teaching Curricula in Matrimonial Law", "A Comparison of Laws in Constitutions", "Teaching Curricula for Civil Suits", "A History of the Organization of Chinese Law", etc. In November of 1978, the Xi Nan Institute of Political Science and Law had completed 86 scientific research articles. Since the institute's restoration, the teachers of the school have had their articles of research published over 50 times in publications such as "Studies in Law Research", "People's Justice" and the "People's Daily"

newspaper. Besides this, they have also coordinated in legal propaganda, the writing of the Penal Code for the People's Republic of China, and havegiven basic lectures and speeches on civil law, criminal lawsuits, electoral law, matrimonial law, etc.

In recent years, law specialists from the United States, Japan and other nations have come to the institute to visit or participate in academics. A technological exchange has been conducted and it strengthens our friendship and promotes academic and research work.

Since the Xi Nan Institute of Political Science and Law's establishment in 1953, it has produced for the nation a total of 3559 undergraduate and specialty students, and over 5430 cadre trained to work in political and organizational positions. At present, the Xi Nan Institute of Political Science and Law is the only institution of its kind in our country to produce and train men and women to become talented specialists in the field of law.

Commencement date: September 20 Current school administrator: Hu Guang Party secretary: Zhang Wen Deng



GUI ZHOU PROVINCE GUI ZHOU UNIVERSITY

Campus Address:

ss: Hua Brook, Southern Suburbs, Gui Yin City, Gui Zhou Province

The Giu Zhou University was established in August of 1942 and it was created by taking the Gui Zhou Industrial and Agricultural Institutes as its foundation in 1941. At that time, the school's address was established in the southern suburbs of Gui Yin City near the Hua Brook. At the time the school was established, there were two other institutes in literature and science and law and commerce with seven departments that were established with it aside from the original two institutes in agriculture and industry with their six departments. This made a total of four institutes and 13 departments in the school. The departments were in: Forestry, agrichemistry, agricultural economics, civil engineering, mining and metallurgy, electric motors and generators, Chinese, foreign languages, history and sociology, mathematics, chemistry, legal economics and law. In 1943, in the Institute of Law and Commerce, the Department of Industrial Commerce Management was established, and in the Civil Engineering Department, the sanitation engineering section was established. In 1944, a research organization for literature and science was established, and the industrial institute established an advanced course in electric motors and generators. In the winter of that year, because the enemy had overtaken and occupied Qian Nan, the school dispersed and moved to Zun Yi. In the spring of 1945, the school returned to its original address. During the summer of the same year, the Department of History and Sociology changed to become the Department of History, and the Forestry Department changed to become the Department of Agricultural Arts. In 1946, the Institute in Science added a department in geology. At this time, there were four institutes with 15 departments, a research center, and an advanced studies course. In addition, there was a training course and a school for industrial management. Вy 1947, the school had a total of 1128 undergraduate students in attendance, there were 245 teaching personnel and an administrative staff of 99 people.

After Gui Zhou was liberated in November of 1949, the Ministry of Military Affairs took control of Gui Zhou University and established a temporary school management committee. In 1953, after the national departmental reorganizations of institutes of higher learning, the Gui Zhou University was abolished. A portion of the staff was retained with the institute in agriculture at the original address and, in 1954, the school became the Gui Zhou Agricultural Institute. The Institute for Science and Literature, the Institute for Law and Commerce, and the Industrial Institue entered the Gui Zhou Teachers College, Yun Nan University, Si Chuan University, Chong Qing University, the Xi Nan Institute of Government and Law, the Si Chuan Institute of Finance and the Hun Ming Industrial Institute.

In August of 1958, the Gui Zhou University was again established. It began with the management of the Gui Zhou Teachers College, and established a joint committee for Gui Zhou Teachers College and Gui Zhou University. The two institutes were separated in August of 1959, and the Gui Zhou University was moved to Hua Brook, where it merged with the Gui Zhou Nationalist's College. By 1960, the school had established seven departments in Chinese, history, foreign languages, mathematics, physics, chemistry and art. Aside from the two specialties in English and Russian established in the Department of Foreign Languages, and the two specialties of Music and American Art in the Art Department, each of the other departments had only one specialty. By the end of 1961, the school had 1976 students in attendance and a staff of over 600 personnel.

In August of 1962, the specialty in Russian was abolished. The students and a portion of the staff were moved to the Gui Yin Teachers Institute and the English specialty of Gui Yin Teachers Institute was moved to Gui Zhou University. In August of 1964, the Department of Art was abolished and it merged with the Gui Zhou Province Institute of Art.

After 1966, the school was destroyed and student enrollment stopped for more than six years. In 1972, the enrollment of students in a three-year program was started and in 1977, the enrollment of undergraduates in a four-year program of study was restored. The Gui Zhou Nationalists College was once again restored when the State

Council approved a request in 1974; however, it was extremely slow in getting established and enrolling students. In April of 1977, it finally was established. By then the Gui Zhou University had entered a new period in its history.

At present, the school has seven departments with 14 specialties, a class of research students, a class in technical translation and two teachers classes.

## DEPARTMENT OF CHINESE

Chinese Language and Literature Specialty

#### DEPARTMENT OF HISTORY

History Specialty

to tool?

### DEPARTMENT OF PHILOSOPHY

Philosophy Specialty

## DEPARTMENT OF FOREIGN LANGUAGES

English Specialty Japanese Specialty Technical Translator's Course in English

### DEPARTMENT OF MATHEMATICS

Mathematics Specialty Applied Mathematics Specialty Electronic Computer Specialty Teachers Course in Mathematics

#### DEPARTMENT OF PHYSICS

Physics Specialty Electronic Technology Specialty Semi-conductor Specialty Teachers Course in Physics

## DEPARTMENT OF CHEMISTRY

Chemistry Specialty Analytical Chemistry Specialty Organic Chemistry Specialty

In October of 1980, the school had 1735 students in attendance and there were 10 research students enrolled. There were in excess of 878 staff members and among them, there were 357 personnel in teaching positions. Among the personnel in teaching positions, there were one professor and two assistant professors, 187 lecturers, 51 teacher's aides and 116 assistant teachers.

The Gui Zhou University is an institution of higher learning with a long standing history. It is also an institution of higher learning with a glorious revolutionary tradition. During the last half of 1949, in order to welcome in the liberation of Gui Zhou, under the leadership of the Chinese Communist Party Worker's Committee of Gui Zhou Province, the teachers and students developed the "anti-persecution and anti-hunger" movements. First of all, some progressive students, such as Shi Jian and Chen Bo Lei, organized the "high principles" agency, then they mimeographed a small newsletter and paper that encouraged the students and teachers. To continue, throughout the whole school they began the "Bargain for student, teacher and worker activities" movement. They selected a chairman for their organization and they presented a massive demonstration and a petition. During the demonstration, the names on the petition were each read aloud and chanted in turn, and this caused a great panic in the Nationalist Party. They sent in their special agents and the confrontation came to blows. Strengthened by guns from The Netherlands, they stopped the students in a very destructive manner. However, the students and teachers were fearless and they had won a great victory.

During the course of events in this period, there were "delegatory welcoming committees" organized in various forms, and these were used to advance the student and teacher counter-revolutionary struggles against the Nationalist Party. The students advocated strikes on their classes, the lecturers (instructors) and staff

(teachers) committees advocated strikes on their teaching activities. Under the resolve and advocations of the famous geologist and head of the science institute, Ding Dao Heng, and a few other professors, the other professors and teachers began a teaching strike.

As the struggle intensified, the more unbridled and frenzied the enemy became. On June 5, 1949, the enemy committed violent treachery against the revolutionary teachers and students of Gui Zhou University. In all, over 30 of our fellow students, Ding Dao Heng, and several professors were arrested. Among them, Shi Jian, Jing She Nian, Jin Qian Qi, Gao Yan Xi, Chen Tai and six others heroically gave their lives.

Since the re-establishment of Gui Zhou University under the leadership of the party, the teachers and students of the school have endured in the bitter struggle, have given their best efforts, and in teaching and scientific research, have made many significant contributions.

Since 1958, the school has produced over 4176 talented men and women who are skilled in various fields for our socialist nation. Some of these graduates have become professors, specialists and some have built inventions, assumed responsibility in leadership positions, etc. They have all assumed their posts in work, and for the establishment of socialism, they are diligently and conscientiously persevering in their studies, endeavoring to work even better. They have received the deep gratitude and praise of the party and the people.

In aspects of scientific research work, the Gui Zhou University, since 1972, has produced 42 graduate level research projects, over 172 theoretical selections, writings, teaching materials and essays. There have been 59 major research successes and among them, there have been 14 committee awards received and three National Science Committee awards received. Some of them have also received international praise. For example, the Department of Mathematics professor Li Yang, a Gui Zhou University graduate of 1964, wrote the theoretical essay "How to Calculate the Complicated Blum Measurements of Result" which was published in the third edition of the 1979 Computer Newsletter. It led to great emphasis being placed

on it by international specialists and scholars, and many major institutions of higher learning and research organizations asked him to go there and lecture. Moreover, it received the interest of many foreign scholars; a telecommunication was received from the Australian Academy of Computer Sciences congratulating him, and in part, it stated that the level of technology had "reached a level comparable to that published in American and western European scientific journals".

In recent years, the school has gradually returned to normalcy in teaching and scientific research has gradually improved since the school's establishment. The number of teachers and students has expanded, and the enthusiasm in scientific research has reached new plateaus. In all, there have been 112 people sent abroad for advanced studies and a new atmosphere of science and research has manifested itself at the school.

The school library is a conglomerate of each department, and each department has its own materials and reading rooms. In all, there are a total of 710,000 volumes at the school.

The school has affiliation with a wireless radio factory, an agri-chemical plant, a printing house and it has an electronic computer center. There is also affiliation with a television university and an elementary school.

The school currently occupies an area of 610 mu. Campus constructed facilities occupy a surface area in excess of 60,000 square meters.

> Current school administrator and party secretary: Yue Feng Zhi



YUN NAN PROVINCE YUN NAN UNIVERSITY Campus Address: Qing Yun Street, Hun Ming City, Yun Nan Province

The Yun Nan University was established on the old site of the Imperial Court of the Qing Dynasty in 1922. The school's earliest name was Dong Lu University and it was a privately established institution. Initially, the school had only two preparatory courses established and there were 13 teachers. In 1925, the enrollment of undergraduate students began. An academy in literature, and an academy in industry were established. The Literature Academy established a Department of Government, a Department of Economics and a Department of Education. The Academy of Industry established a Department of Civil Engineering and a Department of Mining and Metallurgy. In 1929, the Department of History and the Department of Mechanical Engineering were established.

In 1930, the school became publicly established, and the name changed to Yun Nan Provincially Established Dong Lu University. In 1931, the academies became institutes, and the two preparatory courses ceased to be managed. In 1932, the Institute of Literature was expanded to become the Institute of Literature and Science, and an Institute of Education and an advanced course in medical studies were established. In 1933, a Department of Mathematical Science was established.

In 1934, the name of the school was again changed. It became the Yun Nan Provincially Established Yun Nan University, and it was divided into a Literature and Law Institute, an Institute of Science and Industry and an Advanced Medical Studies Branch. In 1937, the Institute of Science and Industry was divided into the Institute of Science and the Institute of Industry. In addition, an Institute of Medicine was established. The Institute of Literature and Law established a Department of Chinese, a Department of Government Economics, a Department of Law and a Department of Education. The Institute of Science established a Department of Mathematics, a Department of Science and Chemistry and a Department of Botany. The Institute of Industry established the Department of Civil Engineering and the Department of Mining and Metallurgy.

In July of 1938, the school became the Nationally Established Yun Nan University.

In 1939, the school added an Institute of Agriculture which established a Department of Agricultural Arts and a Department of Forestry. In 1940, the History Department and the Literature Department added English language sections. The Agricultural Institute added an advanced studies course in silkworms. In 1941, the English language sections became the Department of Foreign Languages, and the Department of Government Economics was divided into the Department of Government and the Department of Economics. The Institute of Industry added the Department of Railway Management, and the Institute of Medicine established an affiliation with a hospital. In 1944, the Institute of Industry added the Department of Navigational Engineering and in 1945, it added the Department of Physics. In 1946, the Department of Machinery was added. Right up until the end of 1949, when the Yun Nan area was liberated, this school had gradually increased the number of institutes to five. There were the Institute of Literature and Law, the Institute of Science, the Institute of Industry, the Institute of Medicine and the Institute of Agriculture. The subordinate departments included the Department of Literature and History, the Department of Foreign Languages, the Department of Law, the Department of Government, the Department of Economics, the Department of Socialism, the Department of Mathematics, the Department of Physics, the Department of Chemistry, the Department of Biology, the Department of Civil Engineering, the Department of Mining and Metallurgy, the Department of Machinery, the Department of Navigational Engineering, the Department of Railway Management, the Department of Horticulture as well as the hospital affiliated to the Institute of Medicine. Prior to the liberation, the greatest number of students in attendance at the school was 1306 and there were 230 teachers. In the 22 years since the school's establishment until 1949, there were a total of 1601 graduates. The entire school occupied a surface area of 360 mu, and the campus constructed facilities occupied a surface area in excess of 25,300 square meters. There were a total of 17 experimental laboratories, and the school library had a collection of books in the area of nearly 100,000 volumes.

In 1952, during the national reorganization of institutions of higher learning, the Department of Law, the Department of Government, the Department of Socialism, the Department of Civil Engineering, the Department of Navigational Engineering, the Department of Silkworms, the Department of Animal Husbandry and the Department of Horticulture were all moved to various related institutes of higher learning across the country. The Department of Foreign Languages and the Department of Economics ceased to be managed. In 1954, the Institute of Industry was taken and independently established as the Hun Ming Industrial Institute. In 1956, the Institute of Medicine was taken and independently established as the Hun Ming Medical Institute. In 1958, the Agricultural Institute was taken and independently established as the Hun Ming Agricultural and Forestry Institute (at present, it has developed to become the Yun Nan Agricultural University and the Yun Nan Forestry Institute). After going through the institutional reorganization, Yun Nan University became an integrated university of literature and science. It established the Department of Chinese, the Department of History, the Department of Mathematics, the Department of Physics, the Department of Chemistry and the Department of Biology. After 1960, the Department of Foreign Languages was restored. In 1961, the Yun Nan Institute of Government merged with Yun Nan University, and the Department of Government was restored. In 1976, a new department in geophysics was established. In 1979, the Department of Economics was once again restored.

Since the establishment of Yun Nan University, especially since the start of the War of Resistance Against Japan, many progressive and famous teachers have assumed positions as instructors at the school. For example, Wu Lin, Fei Zhu Tong, Zhang An He, Lin Tu Nan, Xiang Gu Gang, Chang Zhi Xiang, Bai Chao Bi, Wu Fu Tan, Kan Wen Dian, Hua Lua Qian and Tai Ren Jing. The famous mathematics scholar, Tai Qing Lai, and the literature specialist, Li Chang Tian, both held the position of school administrator for long periods of time.

The Yun Nan University has a glorious revolutionary tradition. Early in 1927, the progressive students of Yun Nan University participated in the struggle to oppose the personnel dispatched by the Nationalist Party to Yun Nan Province. In 1931, the patriotic students and teachers actively organized a movement to propangandize

the "September 18th" incident in the struggle to resist Japanese imperialist encroachment and invasion of the northeastern region.

During the War of Resistance Against Japan, in the time 1938-1939, a great many university students participated in movements, such as the "resist the enemy, then rescue the committee" movement, the massive demonstration in 1944 to counter the Nationalist Party, the democratic movements, the resist the enemy movements, and the organize and unite the government movements. In 1945, they participated in the "December 1st" movement, primarily for the Hun Ming students allied with the Xi Nan University, in the "struggle for democracy" and the "anti-civil war" movements.

During the struggle for liberation, under the leadership of the Chinese Communist Party Provincial Committee in 1946, in spite of the Nationalist Party arrests and suppression of counter-revolutionaries, propaganda exposing the Nationalist Party's murder of the local democrat, Li Gong Pu, as well as other crimes they had committed, became newsworthy items. In 1947, the students and teachers of Yun Nan University expressed their support for the Bei Ping students in the "anti-hunger, anti-civil war, anti-persecution" struggle, as well as in the "anti-American detonation" movement. They resisted arrest by the Nationalist Party henchmen in their progressive student "people's rights and safety" movement. During the national student movement to "oppose American aid", the Nationalist Party agents surrounded the Yun Nan University and began a suppression of the Hun Ming Students, creating the famous "July 15th" incident. In the latter part of 1947, a great many of the students were influenced by the party slogans and sneaked off to the villages to participate in guerrilla units in the Yun Nan and Guang Xi Zhang autonomous border regions where they began to develop a guerrilla war. In the latter part of 1949, when Yun Nan was liberated and peaceful, the Hun Ming students started a counterattack on the Nationalist Party military units. A portion of the Yun Nan University teachers and students organized to protect the school and welcome in the liberation, and a portion of them organized the "self protection vanguard" to protect Hun Ming.

After the liberation, under the concerned care and leadership of the Chinese Communist Party and the people, the Yun Nan University gradually became an integrated school. There were many great developments in aspects of campus facility construction, establishment of specialties, building a corps of teachers, equipping experimentation facilities and libraries, expanding the scale of student enrollment, etc.

After 1952, during the time that the institutional reorganization was taking place, a revision in teaching was also taking place. While keeping the task of teaching as foremost in their efforts, great developments were made in academic research, and many successful results were obtained in this research. In 1960, some 60 regulations for institutions of higher learning were implemented, all of which held teaching to be the primary task, and it was regulated in academic research, production labor, and logistics management, as well as regulatory systems in other areas. These revisions enabled the teaching quality at Yun Nan University to constantly improve.

For a long time since then, the Yun Nan University has conducted relatively extensive research in areas such as history of southwest China's nationalities, plant ecosystems, geological mathematics, differential formulas for irregular shapes, electron optics and electron microscope research, quantum chemistry and microanalysis of organic elements, electron refraction radiation, Chinese character information coding fields, etc. In the Department of History, the professors Fang Guo Qian and Jiang Ying Liang, and assistant professor You Zhong, et al., have written the following texts and teaching materials: "A History of Ancient Thai Nationalities", "Hundreds of Major Foreign Exchange Schools", "A Resource of Na Xi Literature", "Ancient Chinese Nationalities of Xi Nan Province", "A History of the Nationalities of Yun Nan". "A Guide to Historical Artifacts of Yun Nan", "A General Outline of Historical Resources of Yun Nan", "Textual Research of the Historical Geography of Xi Nan Province in China", "An Evolutionary History of the Bordering Nationalities of Xi Nan", etc. In regard to studies on vegetation, Professors Mo Can Ceng and Chu Zhong Xiang, as well as assistant professors Mai Han Qiao, Mo Xian Ming and Yu Wen Xuan, have examined great quantities of materials, and have jointly written books such as "Chinese Vegetation" and "Vegetation of Yun Nan",

as well as having written the first botanical classification guide by order, family and genus to be used for reference. In the Department of Mathematics, the Assistant Professor Wang Xue Ren, et al., in applications of mathematical formulas, has solved problems in predefined research on finding hidden mineral resources. He has made many contributions and, in addition, he has co-authored the book "Multi-variant Systematic Analysis in Geological Calculations" which was published by the Chinese Scientific Press, and has received the praise of geologists, metallurgists and related workers nationally and internationally. In the Physics Department, Assistant Professor Chen Er Gang has conducted electron microscope research with magnifications up to 100,000 times, with transmission range in the area of 15 angstroms. In 1979, his research with magnifications ranging from 40 to 140,000 times, having transmission discrimination ranges of 100 angstroms with an electron scanning microscope, which utilized negative pole electron transmissions via Y2 03--Ir enabled the specimens to endure high intensity light and increased their life span. In the Department of Chemistry. Assistant Professor Han Shu Ce, et al., and personnel from Gu Lin University jointly wrote the books "Theory of Coordinate Fields" and "Theory in Diagramming and Charting a Particle's Orbit Path". The teacher Wang Jing Lan, in aspects of microanalysis of organic elements, has, in all, written over 40 essays. The scholars Zheng Zhun Bei and Mei Qian have jointly authored a textbook on microanalysis of organic elements. In the Department of Physics, Professor Zhang Qi Jiao and the Assistant Professor Guan Lao Min, have achieved very good results in research on Chinese character information coding fields and complex character differentiation. These types of research are characteristic of Yun Nan University. The Science Department also shoulders the responsibility fo research entrusted to it by relevant units and ministries and, additionally, have been very successful in much of it. During the National Science Committee meetings in 1978, the school received eight awards and in the 1978-1979 Science Committee meetings of Yun Nan Province, they received 21 similar awards. In regard to the social sciences, 11 projects for the Chinese Academy of the Social Sciences were

completed, as well as the development of research on the history of minority nationalities in Yun Nan region, minority nationalities literature, and petrol problems in eastern China and southwest Asia, etc.

In the first 17 years after the liberation, the Yun Nan University produced 3554 four and five year undergraduate program students for the country, as well as 33 research students in three year programs. Since the summer of 1966, and because of the Decade of Turmoil, the school stopped student enrollment, teaching and scientific research for about six years. From 1972 when the school was restored, until the present, it has produced 2436 undergraduate students in three year programs for the country.

In 1978, the State Council decided that Yun Nan University would be placed under the administrative management of the People's Government of Yun Nan Province.

Currently, the school has 12 departments and 19 specialties. The program of study is four years in length.

DEPARTMENT OF CHINESE LANGUAGE AND LITERATURE Chinese Language and Literature Specialty

### DEPARTMENT OF HISTORY

History Specialty

#### DEPARTMENT OF GOVERNMENT

Philosophy Specialty

### DEPARTMENT OF LAW

Law Specialty

### DEPARTMENT OF ECONOMICS

and a subscription of the second s

Government Economics Specialty Industrial Enterprise Management Specialty

### DEPARTMENT OF FOREIGN LANGUAGES AND LITERATURE

English Language and Literature Specialty French Language and Literature Specialty Eluosi Language and Literature Specialty

### DEPARTMENT OF MATHEMATICS

Mathematics Specialty Computer Mathematics Specialty

### DEPARTMENT OF PHYSICS

Physics Specialty Electronic Physics Specialty

### DEPARTMENT OF WIRELESS RADIO ELECTRONICS

Wireless Radio Specialty

### DEPARTMENT OF GEOPHYSICS

Geophysics Specialty Climatology Specialty

### DEPARTMENT OF CHEMISTRY

Chemistry Specialty

### DEPARTMENT OF BIOLOGY

Biological Sciences Specialty Botanical Sciences Specialty Currently, the Yun Nan University has established the Research Center for the History of Western Chinese Border Nationalities, a Southwestern Asian Research Center and a Research Center for the Literature of the Nationalities, an Economic Research Center, a Physics Research Center, a Research Center for Plant Ecosystems, a Chemistry Research Center and a Research Section for Shock Wave Tubing, for a total of six altogether.

In 1980, the Yun Nan University had 2962 undergraduate students attending the school as well as 43 research students. At present, the entire school has a staff of 1562 personnel and among them there are 754 instructors. Among the instructors, there are 32 professors, 96 assistant professors, 318 lecturers and 308 assistant teachers. In addition, there are three American teachers instructing English.

Currently, the Yun Nan University publishes the following: "The Front Lines in Thought"(published by the social sciences on a bimonthly basis) and for internal distribution, the following are published on an infrequent basis: "Yun Nan University School Paper (a natural sciences paper)", "Research on Nationalities of the Xi Nan Border Region", "Xi Nan Industrial Materials", "Petroleum Problems in Eastern China" and "Advanced Developments, Trends and Research in Education and Science", for a total of five altogether.

The school library currently has a collection of over 800,000 volumes and among them are nearly 130,000 foreign texts. There are 4200 different types of periodicals (editions) and among them, there are 1000 types of foreign periodicals.

The school occupies an area of 572 mu, and campus constructed facilities occupy a surface area in excess of 140,000 square meters.

The school has established an auxiliary correspondence course program and presently there are 364 correspondence course students enrolled as well as 263 night university students.

The Yun Nan University is also affiliated with a Metal Industries Center, a repair shop, a printing house, a kindergarten and a nursery.

> Commencement date: April 20 Current school administrator: Yue Ji Party secretary: Lin Liang

### YUN NAN INSTITUTE OF FORESTRY

Campus Address: The Hot Springs of An Ding County, Yun Nan Province

The precursory organization of the Yun Nan Institute of Forestry was the Forestry Department of the Institute of Agriculture of Yun Nan University.

The Forestry Department of the Institute of Agriculture of Yun Nan University was initially founded during the third year of the War of Resistance Against Japan in 1939. At that time, because of the detrimental environment used by the war, the Agriculture Institute established itself in the vicinity of Shi Bai Village in the remote Wu Gong County of Hun Ming. The school established three departments or branches, the Department of Agriculture, the Department of Forestry and the Silkworm Farming Branch. Within the institute, an experimental farm was established for use by all of the courses. There were agricultural fields, rice paddies, silkworm gardens and fruit tree orchards on the farm. The Agricultural Institute of Yun Nan University managed itself from this location for more than eight years. There were nearly 300 teachers, students and workers at the school and during this time, it gradually increased in scale.

After conclusion of the War of Resistance Against Japan in 1946, the Agriculture Institute of Yun Nan University returned to the location of Yun Nan University, which was at the former location of the Allied University of Xi Nan (now at Nong Xin Village). It remained here until the liberation.

Although the Agricultural Institute of Yun Nan University was a newly established institute with new departments, the quality of the teachers and the academic level of teaching were not low. This was because (1) at that time, the foundational courses and a portion of the specialties curricula were taken from the literature and law institutes of Yun Nan University (such as foreign languages) as well as the Science Institute (courses in mathematics, science, chemistry and botany) and the Industrial Institute (precise measurements) to

begin; (2) at that time, the institute administrator for the Yun Nan University was the nationally known mathematics scholar, Professor Tai Qing Lai, who frequently invited national and international scholars and professors to come to the school and lecture or teach. In the Department of Forestry some of the bettern known scholars and professors that have assumed duties as instructors or lecturers on a short term basis include Zheng Wan Yue, Zhang Fu Zheng, Tai Ren Jing, Chen Tan, Jiang Zhong Sun, Li Da Cai, Lin Long Xiang, Jiang Zi Ren and Wu Zhong Lun. Because Zhang Fu Zheng was a local person, he supported the Department of Forestry and the Agricultural Institute for quite a long time in his work, all the way up until the initial stages of the liberation.

During the time of the War of Resistance Against Japan, Hun Ming was a very well known city of democracy for the people, and although the Agricultural Institute of Yun Nan University was located in Wu Gong, some 10 kilometers away from the city, the revolutionary topography of the school was closely similar to that of the city. Students of the Institute of Agriculture participated with the students of Hun Ming in the anti-civil war movement, the anti-hunger movement and the anti-persecution movement. In the fall of 1946, Li Gong Pu came to the Institute of Agriculture of Yun Nan University in Wu Gong to take an administrative position and his revolutionary thoughts had a definite influence on the students and teachers of the school.

In the winter of 1946, the Institute of Agriculture moved back to the campus of the Yun Nan University. There the school was directly influenced by the underground party, and it proved to be very useful in the People's Democratic Revolution. Some of the students participated in the ranks and files of the guerrilla units and some of the teachers participated in the peripheral organizations of the party--such as the New Democratic People's Alliance. Some students participated in the Democratic Youth organizations. There were also public democratic organizations formed, such as teachers committees, lecturers and assistant teachers committees, etc. People were striving for democracy in almost every area one could

think of, striving to unmask the oppressive rule of the counterrevolutionaries, and expanding the influence of our party.

After the liberation, from 1949 to 1958 the Department of Forestry at the Institute of Agriculture of Yun Nan Unversity established a specialty in Forestry Industries. Quantitatively speaking, the number of teachers, students, amount of equipment and the number of enrollees at the Department of Forestry all underwent a supersonic expansion. During the period from 1950 to 1958, the number of graduates from the department reached over 200 and, in addition, there were several mid-level forestry technology courses taught that produced 50 men.

In August of 1958, the Department of Agriculture at Yun Nan University and the Department of Forestry separated from the school and formed the Hun Ming Agricultural Institute. The institute's address was in the northern suburbs of Hun Ming at Black Dragon Pool. In the same year, the Department of Forestry Industries was established. In 1959, the Department of Forestry established the specialty in Forest Protection.

In 1960, using the two departments of forestry and forestry industries as a foundation, the Yun Nan Forestry Institute was established. At the same time, a special course in forestry economics was also established. A specialty in subtropical crops, which considered rubber to be the most important, was also established. In 1962, the Yun Nan Forestry Institute was abolished during the implementation of the eight character directive to "reorganize, replenish, solidify and elevate". The components of the school returned to the Agricultural Institute in Hun Ming and the name of the institute was changed to the Hun Ming Institute of Agriculture and Forestry. Until the end of 1966, the Department of Forestry had only one specialty, forestry. During the time of the Hun Ming Institute of Agriculture and Forestry, the Department of Forestry, regardless of which area you wish to discuss, such as teachers, equipment, facilities or the number of student enrollments, continued to develop.

In the summer of 1969, the Hun Ming Institute of Agriculture and Forestry moved to Pin Chuan County. In the winter of 1969, the three departments in agriculture, forestry and animal husbandry returned to and entered the Yun Nan University of Agricultural Industries from Xun Ju. In the beginning of 1973, the Department of Forestry and the Beijing Forestry Institute merged and created the Yun Nan Forestry Institute. The address of the institute was at the Hot Springs of An Ding in Yun Nan. During the Decade of Turmoil, student enrollment stopped, the school had to move three times and the teachers, books and equipment all sustained heavy losses. The original Department of Forest Industries was changed to the Department of the Subtropics. In 1973, it began with the enrollment of three classes of students in three year programs and graduated 109 personnel.

In 1979, after the Beijing Forestry Institute returned to Beijing, the Yun Nan Forestry Institute continued to run itself. Its scale of development changed little from former times. In the past 40 years, the Yun Nan Forestry Institute, in all of its locations and forms, has produced a total of over 1200 cadre for the forestry industries, all of whom have made their contributions towards the establishment of socialism in each area of Yun Nan Province.

Currently, the Yun Nan Forestry Institute is subordinate to the Central Committee's Ministry of Forestry Industries and is the primary institute of higher learning for the forestry industry of the Xi Nan region. The school has established two departments with three specialties and the program of study is four years in length.

## DEPARTMENT OF FOREST INDUSTRIES

Forest Industries Specialty Forestry Pestilence Control Specialty

# DEPARTMENT OF FORESTRY ENGINEERING Forestry Machinery Specialty

In 1980, there were 125 students in attendance at the school. Besides this, there were four research students enrolled in studies of wood and forest pestilences. The entire school has a staff of 493 teachers, workers and administration personnel. Among them, there were 167 personnel assuming duties as teachers. Among the teachers, there were two professors, two assistant professors, 40 lecturers, 53 assistant teachers and 70 teacher's aides.

In recent years, there have been developments in scientific research work at the institute. The institute has participated in research for the Chinese Botanical Annals, the Chinese Annals of Fruit Trees and the writing of the Annals of Chinese Fungus. It has also assisted in and edited the book entitled Chinese Forests. It has participated in the national research project that studied the applications of remote sensors in forests. It participated in the planning of the industrial and agricultural regions of Feng Chong, and the institute assumed responsibility for the planning and design of the forest of Wen Shan Jin City and a resource inspection of the Bureau of Forest Industries of Lu Zhou, etc. Some of these projects have already been completed with very good results.

The school occupies an area of 124 mu, and campus constructed facilities occupy a total surface area of 45,000 square meters.

Current School Administrator: Yu Yong Tao



SHAN XI PROVINCE XI BEI UNIVERSITY Campus Address: Little South Gate, Xi An City

The Xi Bei University is located in the ancient capital of Zhou, Qin, Han and Tang Dynasties, the city of Xi An.

Early in the second year of the Revolution of 1911, in 1913, the supervisor of the city of Shan Xi, Zhang Feng Yi, solicited support from the two provinces of Gan Su and Xin Jiang so the middle school of Xi An and several of the other schools in the area could be used as a foundation for the creation of the "Planning Committee for Xi Bei University" in Xi An. It later established branches in literature, commerce and agriculture. The location of the school was divided between the two locations of the original Academy of Law and Government (now the ancient temple of the 10 characters for eternal life) and the Academy of Advanced Studies (in Dong Men of Xi An City). In 1914, the warlords of the northern coast occupied the Shan Xi area and the Xi Bei University was converted into a specialist school for law and government.

In 1923, Shan Xi Province was under martial law, controlled by Kan Zhen Hua, and during this time the specialist school for law and government was once again taken and used as a foundation for the establishment of Xi Bei University. It was not until 1924, however, that the name actually became Xi Bei University. It established a Department of Law (using the original specialist School for Law and Government), a Department of Industry (using the original School for Water Conservancy and Canal Engineering) and vocational courses in Mandarin, local dialects, government, economics, etc. The program of study was four years in length and there were 400 students in attendance at the school. During this time period, Lu Xun was working on "Course of History of the Chinese Novel" at Xi Bei University. It was later published and became a very well known piece of literature. By 1926, because of the detrimental effect created by the



A courtyard on the campus of Xi Bei University

fighting of the warlords, the teachers and students gradually left the school. During the turmoil of the war, Xi Bei University finally had to close down.

In 1931, after the "September 18th" incident and following the occupation of the Dong Bei region, the Dong Bei University in Long Yin at that time first moved to Bei Ping, then later, a portion of the school, along with Zhang Xue Liang, moved to Xi An. Later. in the auditorium of Xi Bei University, he made the announcement "A school was established in Shen Yang, from our eyes the plans became a reality, then came the day of September 18th, and massacre and destruction followed; we returned to the city of Bei Ping, then turned around and came to Xi An, now after passing through many places, we have found our Shan He". When the Lu Gou Qiao incident erupted in 1937, in September, the three institutes of Bei Ping Industrial Institute moved to Xi An and after more than two months of planning and preparation, on September 1st they established the "Temporary University of Xi An". The entire school established 11 departments in Chinese Mandarin, English, history, mathematics, physics, chemistry, physical education, education biology, geography and medicine.

In March 1938, Shan Xi Province was gradually being overtaken by the enemy and the Japanese invaders lowered many to their graves. The doorway to all of China was being opened. On March 16th, the school moved from Xi An and, after a long trek, finally arrived at Nan Zheng County in southern Shan Xi Province. The campus proper, with the Institute of Science and Literature, the Institute of Education and the Institute of Law and Commerce established itself in the city of Cheng Gu Xian; the Institute of Industry of Medicine was established in Nan Zheng County; the Institute of Agriculture was established in Ji County. On April 3rd, the name became the Nationally Established Allied University of Xi Bei. The entire school had established seven institutes with 23 departments. In July of the same year, the Institute of Industry was independently established as the Nationally Established Xi Bei Industrial Institute (after the liberation, this school merged with the Nan Jing Institute of Navigation and developed to become the present Xi Bei University of Industrial Enterprise). The Institute of Agriculture was independently established as the Nationally Established Xi Bei Institute of Agriculture (and is currently the Xi Bei Agricultura) Institute of Shan Xi Province because of military accomplishments). The Institute of Education changed to become a teachers institute.

In July 1939 the Allied University of Xi Bei changed its name to the Nationally Established Xi Bei University. Hu Er Hua was appointed administrator of the school. The school established an Institute of Literature and Science and an Institute of Law and Commerce. There were 12 departments. They were as follows: three departments in the literature institute: the Department of Chinese Literature, the Department of Foreign Languages and Department of History; five departments in the science institute: the Department of Chemistry, Department of Mathematics and Department of Biology; four departments in the law and commerce institute: Department of Law, Department of Commerce, Department of Government and Department of Economics. The original teachers institute and the original medical institute were independently established in July of the

same year as the Nationally Established Xi Bei Teachers Institute (which is now the Gan Su Teachers University) and the Nationally Established Xi Bei Medical Institute (after victory in the war, it again merged with Xi Bei University). After victory was achieved in the War of Resistance Against Japan, the Xi Bei University moved from Cheng Gu back to Xi An in May of 1946.

On May 20, 1949, Xi An was liberated. This opened up a new chapter in the history of Xi Bei University.

In September 1949, Shan Xi Teachers Vocational School and Shan Xi Vocational School of Commerce merged with Xi Bei University. In 1950, the medical institute that had originally merged with Xi Bei University again separated from the school and became Xi Bei Medical Institute (which is currently the Xi An Medical Institute). The Department of Border Government again moved back from Lan Zhou and was used as a foundation for the development of the present Xi Bei Institute of the Nationalities. In 1952, the Russian Section of the Department of Foreign Languages separated from the school and became the Nationally Established Russian Language Specialists School (and later developed to become the Xi An Institute of Foreign Languages). In 1953, the Teachers Institute separated from the school and became Xi An Teachers Institute (and it evolved to become the present day Shan Xi Teachers College). In 1958, the Department of Law was independently established with the Xi Bei Government Cadre School and formed the Xi Bei Institute of Government and Law (which is currently the Xi Bei Institute of Government and Law). In 1960. the Economics Department separated from the school and became the Xi Bei Institute of Finance (which is currently the Shan Xi Institute of Finance). In 1972, the Shan Xi Industrial College was abolished and the Chemical Engineering Department of that school merged with Xi Bei University. At present, Xi Bei University has become a multi-facuted university, integrated with the branches of literature, science and industry.

Currently, the school has 11 departments with 24 specialties.

# DEPARTMENT OF CHINESE LANGUAGE AND LITERATURE

Chinese Language and Literature Specialty

## DEPARTMENT OF HISTORY

History Specialty Archaeology Specialty

### DEPARTMENT OF FOREIGN LANGUAGES

English Language and Literature Specialty

## DEPARTMENT OF GOVERNMENT THEORY

Government Economics Specialty Philosophy Specialty

## DEPARTMENT OF MATHEMATICS

Mathematics Specialty Computer Mathematics Specialty Computer Science Specialty

## DEPARTMENT OF PHYSICS

Theory of Physics Specialty Laser Physics Specialty Semi-conductor Physics Specialty

DEPARTMENT OF CHEMISTRY

Chemistry Specialty

## DEPARTMENT OF BIOLOGY

Microbiology Specialty Botanical Sciences Specialty Botanical Applications in Medicine Specialty

## DEPARTMENT OF GEOGRAPHICAL SCIENCES

Natural Geography Specialty

## DEPARTMENT OF GEOLOGY

Geology Specialty Petroleum, Natural Climatology and Geology Specialty Mineral Rock Specialty

## DEPARTMENT OF CHEMICAL ENGINEERING

Chemical Engineering Specialty Basic Organic Chemical Engineering Specialty Inorganic Chemical Engineering Chemical Industries Machinery Specialty

The undergraduate program of study is four years in length. The program of study for research students is three years.

Currently at Xi Bei University, the foundational science courses are relatively extensive in nature and some have already evolved into specialties. Furthermore, there have been relatively large developments, quantitatively speaking. In 1980, the number of students in the school reached 3254 (3166 undergraduate students and 88 research students). In the 30 years or so since the liberation, the university has produced over 14,000 men and women who are skilled in all types of training. Many of them have already become cadre in the front lines of the struggle. Currently, the whole school has a staff of 1695 teachers, administrative personnel and workers. Among the staff are 731 teachers. Among the teachers, there are 22 professors, 56 assistant professors, 445 lecturers, 22 assistant teachers and 186 teachers aides.

Currently, Xi Bei University has a total of over 900,000 publications in its library. There are over 2000 types of newspapers and journals. There are over 8000 pieces of historical literature. At present, there are 85 experimental laboratories and these laboratories are equipped with over 1400 types of instruments used for teaching and scientific research. In order to promote a modernization in teaching, the school has established an electronic teaching and education center.

Scientific research organizations have evolved from the time when there were none to the present 12, and include research centers for particle physics, structural geology of the Chinese territory, thermodynamics, synthetic chemistry, molecular biology, application of anti-fungal elements in agriculture, loess plateau geography, Thai and Chinese histories, Xi Bei history, literature of the Tang Dynasty and literature of Lu Xun, as well as a research organization for eastern China. They are responsible for research missions assigned to them nationally and for those assigned by Shan Xi Province. In order to suit the needs of the school and the scientific research units of Shan Xi Province, the school also has established the first large scale analysis and measurements center in Shan Xi Province. In addition to this, the school also is affiliated with a printing house, a machinery factory, a health clinic, a child care center and a subordinate school with a nine-year program of study.

The school occupies an area of 500 mu, and campus constructed facilities occupy a surface area in excess of 126,000 square meters.

Xi Bei University became very prominent in the national and democratic struggles. During the tense moments of the national struggle, in order to support resistance movements against Japan, and to educate the people in the resistance, as well as to elevate their culturalization in the struggle, many national patriots in the eight years of struggle made many significant contributions. During the years of the struggle for liberation, in order to oppose the Nationalist Party and their oppressive policies in their counter-revolutionary activities, progressive students and teachers resisted in the civil war. After the patriotic teacher and student movement, known as the "January 21st movement", in 1946 the teachers and students conducted a three-day anti-civil war and freedom rights movement. It was known as the "Cheng Gu Student Movement". In the next two months, this student movement would become a glorious part

of the history of the Xi Bei region. Later, towards the end of 1948, progressive students and teachers initiated the Min Guang and Hua Zhen movements to counter the oppressive rule of the Nationalist Party. In 1949, the movement to "stop the school move" erupted and this forced agents dispatched from the Nationalist Party to reconsider their plans of destruction of Xi Bei University. By stopping terrible crimes from happening, the students greatly contributed to the preservation of Xi Bei University.

Throughout its history, Xi Bei University has emphasized the use of talented men and women on its staff. The school has invited well known scholars and professors to come and accept positions as teachers or lecturers, or to serve as administrators. During the time of the War of Resistance Against Japan and during the Struggle for Liberation, well known scholars, such as the historian, Xiao Yi Shan, economics scholars, Luo Zhang Long, Wang Ya Nan and Shen Shi Yuan, literary scholar, Shu Zhao Tang, chemists Wu Zuo Zheng and Zhang Hou Han, all assumed positions as leaders or teachers at Xi Bei University. Some worked at the school for 10 years or more. Also, personnel that have held the position of institute administrator include the paleozoologist and paleontologist, Yang Zhong Jian, the famous historian, Hou Wai Hu, physicist Ji Gu Dan, etc. The Chairman of the Chinese National Committee on Physical Education, Wang Yi Dong, for more than 40 years has been engaged in the work of instructing physical education at Xi Bei University. In the past few years following along with the increased activities in academics, Xi Bei University has been inviting increasing numbers of foreign specialists and scholars to come to the school and lecture or teach, and this activity is growing and flourishing day by day.

Xi Bei University has an excellent tradition of emphasizing study and training in basic theory and knowledge. Based on the objectives and training requirements established for each specialty, the school established a standard core curricula, and curricula for the specialties. In order to strengthen studies in foundational theory, only the most experienced and best teachers are selected for foundational studies instruction, and this places primary emphasis on teaching itself. At the same time, studies in research, experimentation and problem solving are also emphasized. The society has recognized Xi Bei University students as "having vast knowledge and a relatively large amount of preparation".

Concrete results have also been achieved in regards to scientific research work. In aspects of research on the natural sciences, at the 178 National Science Committee Meeting over 10 awards were received. In 1979, there were 38 outstanding scientific research projects that received first, second or third place awards at the Shan Xi Provincial Science Committee Meeting. For example, assistant school administrator, Professor Chang Bo Sheng (recently transfered to Xi An Geology Institute), established a theory for isotasal crust movements in China and, at present, it has become one of the five best theories of structural geology in China. In regards to seeking minerals and petroleum, and for preparatory warning of earthquakes and measurement of such, it has very important significance. Professor Wu Bo Zhou of the Department of Physics, in regards to basic particle theory research, has obtained very promising results. In all, his work has been published in over 20 periodicals and journals, and included among his works is his theory on magnetic polarization and opposing fields of attraction, which was recognized internationally as a piece of high level research. Mathematics professor, Wang Cheng Tang, has been conducting , search on topographic reference points, and has written over 10 essays on the subject. In 1964, at Bo Lan Science Institute he published the book, "Basic Mathematics", in which the "ωμ of possible topographic space" was presented. It gave a solution to the question asked in 1950 at the Lan Bo Science Institute by mathematics professor Xi Ge Er, that being "the problem of distance spacing in  $\omega\mu^{*}$  that had been, to that point, unresolved. Last year, he proposed "Applications in use of vast or incalculable numbers" mathematical theory. Research in thermodynamic chemistry began relatively early in our country, and in the early 60's, the first 60-300K vacuum, absolute heat calorimeter was built. In aspects of applied research and test production, there have been many successful results that have an

international level of technology, and have received the priase of specialists in the related areas. In regards to the social sciences, Professor Zhuan Qin Sheng, in his studies on ancient Chinese dictionaries, especially regarding literature of the Oin Dynasty, has written "Du Pu Poetry", "Selected Passages in Du Poetry", "Hidden Passages that Bring Joy and Lift the Spirit", "Selected Readings in Mandarin" and "Selected Joyful Readings in Literature" publications, as well as other writings. In research of the An nationality of the region, at the Center for Research of the Literature of the Qing Dynasty, in the past two years, aside from the many theories having been written, the book, "An Explanatory Discussion of Li Bo", was written. Professor Chen Zhi (who died in 1980) conducted extensive research on the history of the Thai and Chinese, and on Thai and Chinese archaeology. Some of his works include "Enumeration of Chinese Texts", "A Chronology of History" and "Economic History of the Two Chinas". Under the leadership and guidance of the former school administrator, Wu Wai Hu, Professor Zhang Cao Zhi trained for many years; he has conducted much research on the history of Chinese doctrine with impressive results. In order to promote the exchange of scientific research work, and to motivate academic thought, the school regularly published two papers, such as "Journal of Research on Lu Xun", produced by the social and natural science sections, and distributed internationally.

In recent years, the number of foreign students coming to Xi Bei University has been increasing, and friendly relations have been established with several foreign institutions of higher learning. In the past two years, there have been over 200 scholars and specialists from over 20 nations and regions who have come to the school to participate in academic activities or conduct scientific research. Simultaneously, during 1980, the school sent 10 outstanding professors and research students abroad for advanced studies, visits in investigations, to conduct scientific research, or participate in technological conferences.

Currently, teachers and students of Xi Bei University are undertaking the burden of making further history in the modernization of our era, and their contributions are pouring forth.

Current school administrator: Na Qi

/628

XI AN TRAFFIC AND TRANSPORTATION UNIVERSITY Campus address: Cheng Ding Road, Xi An City, Shan Xi Province

Xi An Traffic and Transportation University is a school of science and industry with a rich history. In 1896 (during the last 22 years of the Qing Dynasty), the school was founded in Shanghai. Its name, at first, was Nan Yang Public School. In 1921, the name was changed to Traffic and Transportation University. In 1956, based on a decision made by the State Council, the school was moved to Xi An. In 1959, in order to suit the needs and actual conditions of the two regions of Xi An and Shanghai, branch schools of each area, Xi An and Shanghai, were independently established, and the name of the school in Xi An was designated as the Xi An Traffic and Transportation University. Currently, the school is under the administrative control of the Ministry of Education.

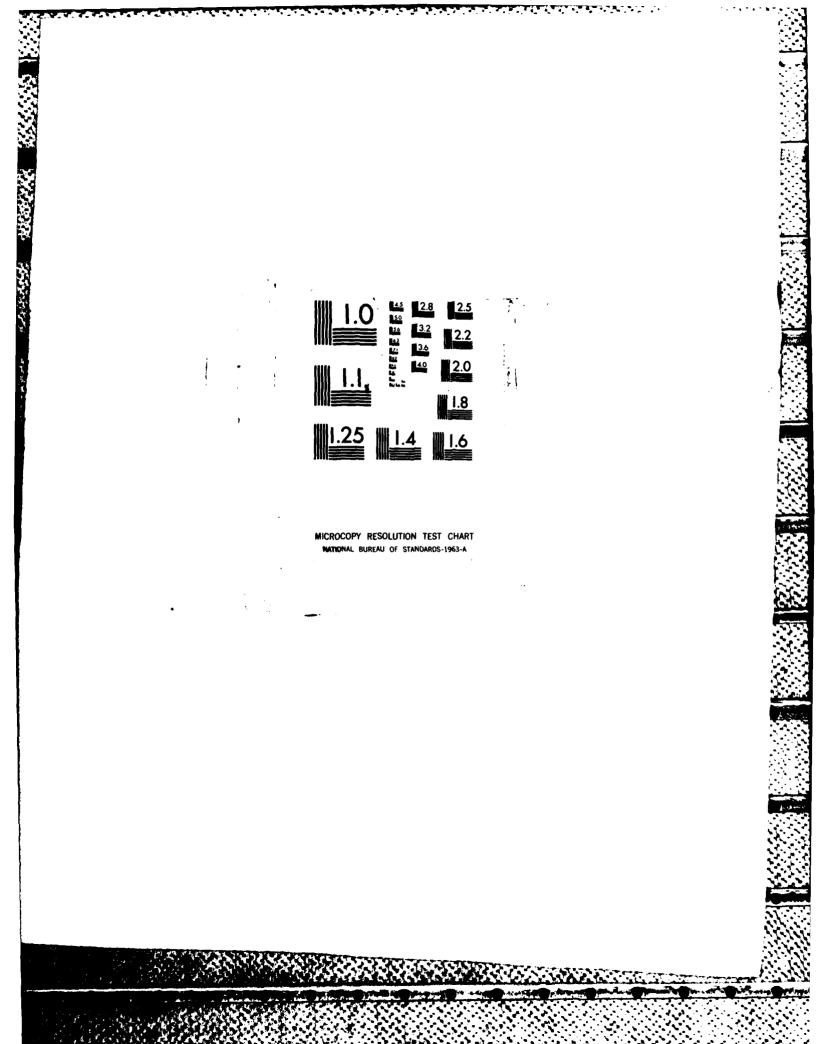
Nan Yang Public School was founded by the Qing government through the efforts of Sheng Xuan Huai. The initial outlay of capital for the school was generously provided by the Postal Ministry and Telegraph Bureau via their commerce funds. Sheng Xuan Huai himself served as the supervisor, and he asked A Xi Hun to serve as assistant supervisor, and help support the school. In 1905, the school fell under the control of the Ministry of Commerce, and the name was changed to Ministry of Commerce's Advanced Academy of Enterprise and Operations. When it was initially founded, the basic guiding principle was "Chinese studies for the body, Western studies for the mind". In all, the school established a teachers institute, a Department of Economics, a course in commerce, in government, a translator's institute and a middle and elementary school subordinate to it, as well as a Chinese institute and a foreign institute. In 1906, the school was subordinated to the Postal Ministry and the name was changed to Advanced Academy of Enterprise and Operations of the Postal Ministry. Vocational courses in railways, electric motors and generators, and locomotive engineering were established. Orientation of the school began to develop in the direction of industry and science.

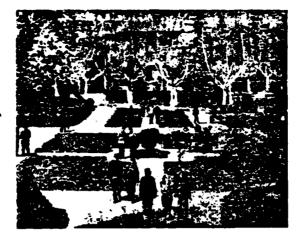
After the Revolution of 1911, the school was placed under the administrative control of the Bei Yang government's Ministry of Traffic and Transportation. In 1912, the name was changed to Nan Yang University of China, and Kang Wen Zhi served as the school administrator. The name once again changed to Ministry of Traffic and Transportation Industrial Specialist School of Shanghai. The vocational course in railways was expanded to become the Department of Civil Engineering, and the electric motors and generators course was expanded to become the Department of Mechanical Electrification. The course for engineers (both ships and trains) was expanded and became the independently established Wu Gong Pilot's Academy. In 1921, the Ministry of Traffic and Transportation merged the Shanghai and Tang Shan industrial vocational schools under its jurisdiction, and they were merged with the Beijing Telecommunications Institute. The name for these merged schools became Traffic and Transportation University. The school administrator was Ye Xing Zao. The part of the school located in Shanghai was named Hanghai Traffic and Transportation University. The Department of Civil Engineering in the Shanghai school was taken and merged with the Tang Shan school, and the railway management and science course was merged with the Beijing school. Moreover, the electrical engineering course at the Beijing school was moved to Shanghai, as was the mechanical sciences course at Tang Shan. The Shanghai school's mechanical engineering branch established three vocational courses in factory machinery, railway machinery and industrial management; its electrical engineering branch established three vocational courses in electrical

engineering, cable telecommunications and wireless radio communications. During this time, the three legs of the triangle formed by the mechanical engineering classes at Shanghai, the civil engineering classes at Tang Shan, and the management classes at Beijing were all producing talented men and women for the railway industry. In 1922, Traffic and Transportation University of Shanghai once again changed its name to Nan Yang University and, at the same time, it restored the Department of Railway Management.

In 1927, the Nationalist Party established itself in Nan Jing. The school became subordinate to the Traffic and Transportation Ministry in Nan Jing. Its name was changed to First Traffic and Transportation University. In the following year, the Traffic and Transportation Ministry separated into two different ministries, the Traffic and Transportation Ministry and the Railway Ministry. The school became sutordinate to the Railway Ministry. From 1929, the school was designated as Traffic and Transportation University. Aside from the four originally established institutes in electric motors and generators, machinery, civil engineering and management, the school also established a science institute and a spinning and weaving institute (the science institute offered courses such as basic sciences). In 1937, all institutions of higher learning throughout the country were subordinated to the leadership of the Ministry of Education. After the "August 13 incident", the school was relocated to several areas, and aside from Jia Jiang, it included Nan Jie Zhen Dan University and the Chinese School of the Arts and Social Sciences (having mutual boundaries) where classes were continued. In August 1940, planning began for a constituent institution of the Traffic and Transportation University to be located in Chong Qing. In 1941, after the War in the Pacific erupted, the bordering regions in Jiang were annexed and the Chong Qing School became an auxiliary institution. Furthermore, the Chong Qing School of Commercial Navigation was merged with the auxiliary institution: in Shanghai, a portion of teachers and students continued classes After victory in the War of Resistance, the school moved back -Shanghai. At that time, it established three institutes

|    | AD-A137 587 BRIEF INTRODUCTION TO HIGHER EDUCATION INSTITUTIONS IN<br>CHINA(U) FOREIGN TECHNOLOGY DIV WRIGHT-PATTERSON AFB OH<br>12 JAN 84 FTD-ID(RS)T-1082-83 |    |     |   |   |  |  |  |     |       |     |    | 9                |    |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----|---|---|--|--|--|-----|-------|-----|----|------------------|----|
| ĺ. |                                                                                                                                                                |    |     |   |   |  |  |  |     | F/G 5 | 5/9 | NL |                  |    |
|    |                                                                                                                                                                |    | 261 |   |   |  |  |  |     |       |     |    |                  |    |
|    |                                                                                                                                                                |    |     | ł |   |  |  |  |     |       |     |    |                  |    |
|    |                                                                                                                                                                |    | 201 |   |   |  |  |  |     |       |     |    |                  |    |
|    |                                                                                                                                                                | µ⊅ |     |   | ¢ |  |  |  |     |       |     |    |                  |    |
|    |                                                                                                                                                                |    |     |   |   |  |  |  |     |       |     |    |                  |    |
|    |                                                                                                                                                                |    |     |   |   |  |  |  |     |       |     |    |                  | 27 |
|    |                                                                                                                                                                |    |     |   |   |  |  |  | . 1 |       |     |    | نى<br>ئەرمەسىلەر |    |





A view of the campus of Xi An Traffic and Transportation University

organization: the Industrial Institute with nine departments in civil engineering, electric motors and generators, machinery, navigation, shipbuilding, chemical engineering, water conservancy. spinning and weaving and industrial management, as well as three vocational courses in turbines, sea navigation and telecommunications; the Institute of Science, with three departments in mathematics, physics and chemistry; and the Institute of Management, with five departments established in transportation management, finance management, telecommunications management, turbine machinery management and sea navigation management. There was also established a Telecommunications Research Organization which enrolled university graduates from the Department of Physics and the Department of Electric Motors and Generators as research students. Until · the time of National Liberation, aside from the Department of Turbine Machinery Management and the vocational course in turbine engines which merged to form the Department of Turbine Engineering and became subordinate to the Industrial Institute, there was little change in the other institutes. At that time, there were 340 teachers at the school. Among them, there were 121 professors, 31 acting professors, 42 assistant professors, eight acting assistant professors, 26 lecturers, five acting lecturers and 107 assistant teachers. There were 2190 students in attendance. The school, in the 53 years from 1896 to 1949, had produced a total of 5044 graduates and 36 research students.

In May 1949, Shanghai was liberated. The school fell under the control of the People's Government and in regards to the departments and curricula as well as teaching, work gradually began for their revision. Beginning in 1952, a national reorganization of institutions of higher learning was conducted and specialties were created. Tong Ji University, Da Tong University, Hú Jiang University, Zhen Dan University, Zhi Yue Yi University, and machinery and electric motor and generator vocational courses of Shanghai Industrial Vocational School were taken and merged with Traffic and Transportation University. At the same time, the departments of Science Institute and Management Institute of the Traffic and Transportation University, as well as its Industrial Institute's departments in navigation, water conservancy, spinning and weaving, civil engineering and chemical engineering, were taken and dispatched to the various schools of Fu Dan, Tong Ji, Hua Dong Teachers College, Northern Traffic and Transportation University, Hua Dong Navigation 1 Institute, Hua Dong Spinning and Weaving Institute, Hua Dong Water Conservancy Institute, and Hua Dong Institute of Chemical Engineering. In 1954, the Department of Motive Force Machinery Manufacturing's specialty in automobiles was dispatched to Chang Qun Tractor and Automobile Institute. In 1955, the Shipbuilding Department of Da Lian Institute of Industry was merged with the school. After many reorganizations, there were seven departments in all that were established at Xi An. They were in machine manufacturing, motive force machinery manufacture, electrical engineering, transportation and heavy machinery manufacture, shipbuilding, electronic component assembly and telecommunications engineering. In order to suit the stringent requirements in the national reorganization and establishment, from 1952 to 1954, other than the undergraduate specialties, there were vocational courses established in metal industries craftsmanship, metal cutting implements, forging, welding, thermal control, foundry work, industrial enterprise electrification and electric motors and generators which were two years in length. Since 1954, there has been a revision in the length of the program of study for the undergraduate specialties. The original four year programs were changed to five years in length.

In order to support the establishment of Xi Bei, in 1955 the State Council decided to move the Traffic and Transportation University from Shanghai to Xi An. After more than a year's work. until the summer of 1956, the foundation studies branch and four departments in machinery manufacture, motive force machinery manufacture, electronic components assembly and electrical engineering began their move to Xi An. The departments in heavy transport machinery and shipbuilding were retained in Shanghai. The Department of Telecommunications Engineering was moved to Cheng Du Telecommunications Institute. From 1957 to 1959, based on the conditions at that time, the Traffic and Transportation University remained separated into two schools in Xi An and Shanghai, but were under a singular management. In 1957, they took the Xi An Motive Force Institute in its entirety (in 1960, the Shan Xi Industrial College was established in this school's location), the Xi Bei Industrial Institute of Spinning and Weaving, Geology and Mining Departments, three altogether, as well as the Agricultural Field Water Conservancy and Soil Improvement Specialty of the Xi Bei Agricultural Institute. and merged them with the Xi An Traffic and Transportation University. In the summer of 1958, they established the Department of Wireless Radios and Department of Mathematics and Mechanics. In addition, the two departments in geology and mining were taken and dispatched to Xi An Mining Institute. In 1959, after obtaining approval of the State Council, the two schools in Shanghai and Xi An were independly established. The name of the school in Xi An became Xi An Traffic and Transportation University. In the same year, the Department of Electronic Component Assembly and Department of Electrical Engineering were merged to create the Department of Electric Motors and Generators Engineering. In 1960, the two departments of water conservancy and spinning and weaving were dispatched to Shan Xi Industrial Institute, and the school added an Engineering Physics Department. Since then, Xi An Traffic and Transportation University has gradually developed as a multi-faceted university of science and industry that considers machinery, electronics and mathematics to be of prime importance. By 1966, the school had established six

departments in machine manufacturing and engineering, motive force machine manufacturing and engineering, electric motors and generators manufacture and engineering, wireless radio engineering, mathematics and mechanics and engineering physics. There were a total of 29 specialties. During the time of the Decade of Turmoil, the school was completely destroyed. Order in the University was chaotic at best and student enrollment ceased for more than six years. In 1972, enrollment of students in three year programs of study began and five sessions of students were enrolled. After smashing the "Gang of Four" in 1977, the nation restored national entrance by examination system for students entering institutions of higher learning. Students entering the school were enrolled in four year programs of study. In each aspect of work at school, things gradually began to return to normal. Since the liberation, the school has produced a total of 29,000 undergraduate and vocational students and 173 research students. They occupy every position and post in our nation in its struggle to establish socialism. Many of them have become the technological core of strength for our country. In addition, the school has produced 32 foreign exchange students.

During the long time that the school has been managed, it has accumulated a group of teachers with a relatively abundant amount of teaching experience. With the emphasis placed on quality and selection based on having the most outstanding records, the foundations have been strengthened, and the school spirit has traditionally emphasized strict requirements and realistic teaching. Before the liberation, many outstanding students of the better known coastal middle schools in Dong Nan registered for the entrance examinations. The school then reviewed student records and selected the best of the applicants for entrance. Foundational courses in mathematics, science and chemistry, as well as Chinese and English, were emphasized. This created a fairly sturdy foundation for the students. In the course of teaching, teachers concentrated on the main points in their lectures and the majority of curricula was learned by individual study efforts put forth by the students.

This created students with an unbreakable spirit and the ability to do individual work. The school also emphasized the development of physical education activities, and advocated a spirit of plain and simple living. Resultingly, the graduates of Traffic and Transportation University, through the spirit of plain and simple living, because of the school's strict requirements and their outstanding academic qualities, enjoyed a widespread and renowned reputation. Since 1898, the school has sent exchange students abroad for advanced studies. Much of the money spent in the course of examination and selection for exchange students is spent on students of Xi An Traffic and Transportation University. Traffic and Transportation University has extended its relations with other institutions globally. At present, there are foreign exchange liaisons from Traffic and Transportation University in schools in the United States, England, France, Germany, Japan and Italy. Because of such relations, from the United States alone, since 1949, there have been over 500 Traffic and Transportation University students graduate from abroad. Some of these people include scientific scholars and local personalities, such as Xian Xue Sen, Wu Wen Hou, Cai Yi Sheng, Mo Wu Qua and Zhang Guang Dou. Graduates living outside the country include Ji Chong Ren, Wu Yi She, Yu Ren Chu, Shi Zeng Shi, Wang An, and Zhong Dao Yi.

After the liberation, the Traffic and Transportation University maintained and developed most of the old traditions and conventions established, such as training students to have the ability to understand and study the foundational sciences, doing experiments with what they have learned, having strict and very rigorous testing, applying the "three goods" principles, advocating the slogan "active thoughts, active studies, active lives", and enabling students to have wisdom in the development of the body and mind, in all areas, which has given them a deep and well cultivated ability to work independently. They are occupying every position and post in the struggle for socialist establishment. Some of the prominent figures emerging include Professor Meng Qing Ji, who obtained many favorable concessions for the country in international

treaty talks; he was a graduate of our school in the 50's and is presently working as a professor. There is also Professor Kang Zhao Gan who is assistant section leader of the Vibration Studies Section for the Chinese Committee on Mechanics Sciences. He is also a graduate of the school from the 50's. The youngest researcher at the Chinese Academy of Science is Zhu Gui Zheng who has made many great contributions in regards to argumentative theories on curvilinear research application. In Taiwan, the internationally recognized leader in heavy machinery engineering, teacher Chen Shi Pi, was a graduate of the Traffic and Transportation University.

The Traffic and Transportation University has had a glorious revolutionary tradition. Early in the time of the Great Revolution, the school was not far detached from the establishment of the Chinese Communist Party organizations. Under the leadership of the party during the historical political struggles for a people's democracy, the school's students and teachers put up heavy resistance against the Nationalist Party bureaucracy. They were the fabric of a powerful current of revolutionary movements. They trained themselves, educated the masses and became a pillar of support in the people's democratic movements in Shanghai. They earned the glorious designation of "protectors of democracy" for the Shanghai region.

In the "May 4th movement of 1919," over 600 students from the school echoed the slogan started by the students of Beijing that called for the expulsion of foreign governments and a return to internally controlled government. On May 7th, they walked out of the school gates and participated in a municipal strike of the city. They called strikes on their classes and created a massive demonstration. At that time, their leader was a civil engineering student, Wu Zhao Jiang, who advocated the organization of a student committee. They founded the Nan Yang School of the Arts, which enrolled workers in and out of school. Students were given remedial training in culture and in the propagation of patriotism. The Nan Yang School of the Arts was managed for over six years and a spirit of mutual unification began to spread among the masses and the educated intellectuals for the first time. The school also ran the Nan Yang Daily and the Nan Yang Weekly papers which were sold to raise funds to support the school. They were published by the students committee. The papers propagated a new culture and a new line of thought. In the "April 12th counter-revolutionary political incident" that followed, Wu Zhou Jiang was bludgeoned to death by the Nationalist Party henchmen sent to quell the revolutionary movement.

In 1925 at a protest rally in Shanghai at the Ri Shao factory, communist party members were killed by gunfire. The workers initiated the "May 30th movement" and under the leadership of the student committee, they organized and began walking through the streets protesting aloud the bombings and demanding a lowering in the cost of daily necessities. In a demonstration by the masses on Nan Jing Road by the gates of the old Jia Pu house, they demanded that those who had been arrested be set free and a middle school student named Chen Hou Qie was killed when seven rounds fired from an English patrol hit him.

During the time of the War of Resistance Against Japan under the leadership of the underground Chinese Communist Party, students of the Traffic and Transportation University developed the antihunger, anti-civil war and anti-persecution political movements. The masses became aware of the uprising, and strength of the masses in the people's democracy swelled and expanded in a supersonic fashion. In 1947 when the War of Resistance Against Japan at sea was going on, the two departments of navigation and turbines stopped being managed. Moreover, a movement to protect the school and resist the Nationalist Party military police in their student movement suppressions was initiated, and became the famous "May 20th movement". All of the teachers and students in the school fought bravely in the struggle and they gained an active momentum and ultimately exposed the counter-revolutionary buffoonery in all of its ugliness. In its struggle, the underground communist party attracted and educated many comrades. In addition, planning was set up for the dispatch of cadre to the liberated regions. Among those sent, many became

766

leaders and cadre in our country's scientific and technological community. On the eve of liberation in Shanghai, the Nationalist Party increased its efforts in suppressing the people and engaged in every type of destructive endeavor. Teachers and students of the Traffic and Transportation University were severely persecuted. Many were imprisoned and the president of the party organizational committee, Can Han Yang, as well as the student committee historian, Bei Xu Can, were executed. The spirit of both of the patriots, Can and Bei, whose blood had been sacrificed, urged teachers and students of the Traffic and Transportation University to unite and fight in the struggle. They protected the school and welcomed in the new liberation.

The Traffic and Transportation University, after enduring the difficult history of three ruling governments, the Qing Dynasty, the Bei Yang warlord and the Nationalist Party government prior to liberation, the old appearance of the school took on a new look, and developments began to occur very quickly. In 1953, the Central Committee sent Jing Kang to serve concurrently as the Party Secretary and School Administrator. Jing Kang supported the school in its work for 14 years and had the resolve of a tiger and carried out many endeavors.

The entire school currently has nine departments with 31 specialties. The program of study is four years in length.

## DEPARTMENT OF MATHEMATICS

Computer Mathematics Specialty Applied Mathematics Specialty

## DEPARTMENT OF ENGINEERING MECHANICS

Machine Manufacturing Craftsmanship, Facilities and Automation Specialty Metal Materials Specialty Metal Forging Specialty Foundries Specialty Welding Specialty Hydraulic Augers and Mechanical Control Engineering Specialty

## FIRST DEPARTMENT OF MOTIVE FORCE MACHINERY

Thermal Engineering Specialty Thermal Drive Turbine Engine Specialty Power Plant Thermal Motive Force Specialty Nuclear Reactor Engineering Specialty

A PARTY SCALLER

1202121212121212

and the second of the second of the

### SECOND DEPARTMENT OF MOTIVE FORCE MACHINERY

Low Temperature Technology Specialty Compressors and Refrigeration Technology Specialty Aerodynamic Motive Force Engineering Specialty Internal Combustion Engine Specialty

## DEPARTMENT OF ELECTRICAL ENGINEERING

Electrical Systems and Automation Specialty High Voltage Technology and Equipment Specialty Electrical Insulation Technology Specialty Electrical Technology Specialty

## DEPARTMENT OF ELECTRONICS ENGINEERING

Electronic Computer Specialty Computer Software Specialty Semi-conductor Physics and Components Specialty Electronic Vacuum Technology Specialty Electron Particle Accelerators and Vacuum Technology Specialty

## INFORMATION ENGINEERING AND CONTROL SPECIALTY

Wireless Radio Technology Specialty Wireless Radio Elements and Materials Specialty Industrial Automation Specialty Biomedical Electronic Engineering Specialty

## DEPARTMENT OF MANAGEMENT ENGINEERING

Management Engineering Specialty

5.615 S.S.S.S.S.

In 1980, there were a total of 6299 students in attendance at the school, and there were 220 research students. There is a staff of 3511 teachers and workers for the entire school. Among the staff, there are 1491 teachers. Among the teachers, there are 35 professors, 180 assistant professors and 907 lecturers.

There are currently research institutions established for research on metal materials and reinforcement, systems engineering research, mechanical engineering research and thermal physics engineering research. There are five research centers. They are: Computer Science Research Center, Electrical Insulation Research Center, Electrical Engineering and Electric Motive Force Systems Research Center and Research Center for Natural Dialecticism. In addition, there is a section for foundational studies. Starting in 1977 and since then, there have been teachers courses conducted in mathematics and 10 other areas. The school is also affiliated with a machinery factory, a scientific instructional aids plant, a radio factory and a printing house - four affiliated organizations altogether. The whole school has 45 laboratories with over 25,000 different types of devices. There is an electronic teaching center complete with color video recording devices, sound recording systems and close circuit television recording systems. There are 12 electronic classrooms provided for use by the whole school, and they can seat approximately 2000 persons when used for simultaneous instruction. The school library was built with a surface area of approximately 11,000 square meters and it has over one million publications in its collection. Among the collection, over 30% of the texts are foreign publications. The library has a collection of over 7300 past editions of journals and over 3100 current editions. From among the journals in the library, over half of the collection is foreign published material. In addition, since 1979 the Ministry of Ed catir nas designated nine libraries as National Foreign Resourc- Materials Centers, and within the library is the Xi Bei Center. It already has over 6000 original publications in its collection.

The school has quite a few athletic fields and physical education facilities. There is a gymnasium, lighted playing fields, a standard size swimming pool, a stadium housing a track and a playing field (including football), and there are over 10 tennis courts and baseball fields, all provided to give the best conditions for athletic training for the students of the school.

After smashing the "Gang of Four", the nation restored the process of entrance by examinations, which was a system of selection of enrollees based on outstanding academic performance. The school also renewed its efforts in the teaching of the foundational sciences, and in maintaining its tradition of training students in the basic abilities deemed requisite. The school also put its main thrust of emphasis on new teaching methodologies and more stringent requirements for the students. Many of the prominent professors and scholars of the school lecture or teach on a temporary basis, compile instructional texts, or lead younger professors in their research work. At the Traffic and Transportation University, some of the instructors who have taught for over 50 years, and are in their eighties include the well known electric motors and generators scholar, Chong Tao Pu, the well known electronic wave propagation specialist, Huang Shi Qun, the Chairman of the National Industrial Sciences Curriculum Committee for the Industrial Institutes of the country, You Xiang Jin, and the committee member of the National Committee for Physics Instructional Materials in institutions of higher learning, Yue Fu Jin, etc. They still participate in teaching, scientific research work and the compilation of instructional materials. In recent years, teachers from all of the related fields have compiled or written over 60 instructional texts for the country's institutions of higher learning. From among these, they participated in the editing of some 20 texts, and were responsible for writing around 40 texts. Since the time the school moved until 1979, it has, in all, been responsible for the compilation and editing of over 1400 different texts and among these texts, over 240 were written for public distribution.

The Traffic and Transportation University expanded its number of teachers and has continued to promote the excellent tradition of combining teaching and academic research work and not considering them as being mutually exclusive. Scientific research work is a part of the planning in every area of academics. During the epoch of the "Gang of Four", academic research work was halted completely. During the four years from 1975 to 1979, the school assumed responsibility for a total of 859 national research projects. Of these, 235 achieved satisfactory results. Included among the successful projects that have achieved an international level in technology are: a project to bring into play the theory of strengthening metal materials and using them as replacements for conventional materials; research and experimentation on successive motive force theories; new machinery theories on vibrating metal cutters; high voltage, step up power converters and remote sensor measurement and detection, etc. There have also been produced 129 successful projects that have reached national levels of technology. From among these projects, 37 received National Science Committee awards, and 12 received committee awards from the relevant committees of the Chinese Central Committee. There were 48 projects that received Shan Xi Provincial Science Committee awards, and in addition, there were another 26 projects that received awards from the Shan Xi Province Technological Review Committee in 1978 and 1979. Most recently, the school has announced five research discoveries, and has received three National Discovery awards for projects, such as the rare Earth metal magnesium phosphorous coated iron 320 atM hi-pressure cylinders, which have already been approved by the State Council.

えいろう

In Scientific research work, maximum effort is given to bringing into full play the leadership and ability of the older professors. This, in turn, gives the younger professors a sense of excitement in their work, and unites them both in their struggles. It ultimately provides faster and even better results. For example, in the Research Institute for Metal Materials Strengthening and Reinforcement, under the leadership of Zou Cong Jiu, the assistant school

administrator and a member of the Chinese Academy of Science's Academic Committee, and under the leadership of the assistant school administrator and leader of the Research Institute for Thermophysics Engineering, Professor Chen Xue Hou, extensive research has been conducted on every aspect of metal materials strengthening and reinforcement for use as replacements of conventional metals. They have been responsible for the research on 20 major national research plans, and whether it has been in experimentation or in planning, their results have been outstanding. In 1965, this institute's research on Theory of Resistance In Consecutive Assaults was designated as number one among 114 other successful research projects. This theory was successful in production tests and experiments, and many applications for its use have been found. Its overall effect has been to reduce the cost of production of metal materials, to extend the lifespan of metals in use, and to preserve natural resources. This institute's research on rock drills, pistons and six other projects has saved over 40 million yuan and more than 30,000 tons of metal for the nation.

In their studies of the foundational sciences theories and applications, the school wholeheartedly emphasizes trends in modern research. Some of the new fields of scientific and academic research being developed at the school include biomedical electronics engineering, atomic resources, materials research, superconductors and population theory and control. From among these areas, some of the research has already achieved very promising results. In order to pass on the results of such successful work, the school regularly publishes the "An Traffic and Transportation University School Paper", which is for public distribution nationally and internationally.

In recent years, the school has conducted extensive technological exchange activities with institutions abroad. It has invited a few of the nation's well known scholars and professors to come to the school and teach or lecture. It has sent 36 professors and assistant professors abroad to 25 different countries to participate in technology conference and, in addition, has sent nine investigative delegations abroad. There have been 55 teachers sent to the United States, England and other countries for advanced studies, and there have been seven research students sent to England and Japan for studies. The school has signed agreements with several foreign institutions stipulating cooperation and establishment of school liaisons. The school has invited 17 famous foreign professors to come and teach, lecture or visit.

The Xi An Traffic and Transportation University is located on Cheng Ding Road in eastern Xi An and is in the location of the Lane of Hope that was established by the supervisor Xing Qing of the Tang Dynasty. The school occupies an area of 1350 mu, and campus constructed facilities occupy a surface area of 340,000 square meters. In addition, there are facilities occupying over 40,000 square meters of surface area under construction at present. Because of its early origins in Shanghai, the school has cooperated with the municipal bureaus in planning, etc. In the past 20 years or so, the school has been emphasizing work in campus beautification and the campus is green with shrubbery which remains beautiful throughout the four seasons. The campus is one of Xi An City's scenic spots. In order for the Xi An Traffic and Transportation University to cultivate talent for the plan of four modernizations, the school must stick to the old cultural values and must also hold in glory what has been accumulated from the past.

> Current school administrator: Chen Yu Wan Party secretary: Su Ya

XI BEI INDUSTRIAL INSTITUTE Campus address: Friendship with the West Road, Xi An, Shan Xi Province

The Xi Bei Industrial Institute was created in October 1957 when the Xi Bei Industrial College and Xi An Navigational Institute merged. The Xi Bei Industrial College was established in July of 1937 by merging the schools of Bey Yang Industrial Institute, the Industrial Institute of Bei Ping College and the Industrial Institute of Dong Bei University together. The school began with the establishment of nine departments. They were in civil engineering, mining, machinery, electric motors and generators, chemistry, spinning and weaving, water conservancy, navigation and industrial management. During that time, the War of Resistance was in progress and many well known scholars of the engineering community came in succession to the school. Most of the students came from the wartorn regions and having endured bitter and difficult struggles. they created a school spirit that was unsophisticated and simple. Xi Navigational Institute was derived from the original Hua Dong Naviational Institute and in 1952, that was created from the engineering departments from the three institutions of Bei Jing University. the Traffic and Transportation University and Zhe Jiang University. Four specialties in aircraft design, aircraft assembly, aircraft engines and aircraft engine assembly were established. In 1956, it moved from Nan Jing to Xi An.

The two schools were actually merged on October 5, 1957, and this created the Xi Bei Industrial Institute. During the initial stages of school establishment, they set up departments as follows: Department of Aircraft, Department of Aircraft Engines, Department of Shipyard Facilities, Department of Navigational Hot Work, Department of Chemical Industries and a foundational studies section. There were 14 specialties established. There were 773 teachers and 4274 students at the school. After 1958, the school continued to establish the following departments: Department of Space Navigation, Department of Wireless Radios and Electronic Engineering, Automatic



A view outside the school gate of Xi Bei Industrial Institute.

Control Navigation, etc. The school gradually became a multiscience institute, and considered the navigational sciences, united with science and industry, to be of prime importance. Enrollment of research students began in 1959. By 1965, the number of personnel at the school holding positions as teachers had grown to 900, and there were over 5500 students in attendance.

During the Decade of Turmoil, the school was completely destroyed and all student enrollments stopped for more than three years.

In the summer of 1970, the Department of Navigation from the Har Er Bin Military Engineering Institute was merged with Xi Bei Industrial Institute, and this increased the strength of the school.

In 1977, the program of study for undergraduate students was restored to four years in length. Enrollment of research students was once again restored in 1978.

Xi Bei Industrial Institute cultivates and promotes a practical and realistic, steady and sure spirit of overcoming obstacles in the bitter struggle in its work, and this spirit has been developed over the years. In teaching, study of the foundational theories in science, and every type of realistic and straight-forward teaching is emphasized, and this creates a good foundation for study of the specialties. In aspects of scientific research work, the school has not only had some relatively large developments, but also has developed some unique individual characteristics and obtained some important successes in its research work. In 1978, at the National

/632

Science Committee meeting, the school received 21 awards and commendations for successful research projects. It has 54 awards and commendations from the Third Ministry of Machine Building and Shan Xi Province.

Xi Bei Industrial Institute has not only developed a fairly colorful history, but has also created a teaching staff replete with prominent scientific scholars and professors, such as:

Professor Huang Zhu Ce, who has long been engaged in research on strengthening aircraft structures, and has also been successful in research on fatigue and stress mechanics. He is Director of the Chinese Mechanical Sciences Standing Committee, and is also a member of the Standing Committee of the Chinese Navigational Sciences Committee.

Professor Li Wen Mei, who has long been engaged as a teacher, and is the author of many instructional texts on material mechanics, applied mechanics, theory of mechanical sciences, and vibration theory, all of which have received praise from the community of mechanics scholars in our country. He is currently assistant school administrator of Xi Bei Industrial Institute, and is a member of the Standing Committee of the Chinese Mechanical Sciences Committee.

Professor Meng Shi Jun, who has long been engaged in research on motive forces in the atmosphere necessary to breach the sound barrier. He has received a National Science Committee award. He is currently assistant school administrator for Xi Bei Industrial Institute, a member of the Science and Technology Committee of the Third Ministry of Machine Building, he presides over the Academic Council of the Chinese Mechanical Sciences Committee, is a member of the Chinese Navigational Sciences Committee and has been published in the West German magazine, Calculation Methodologies in Applied Mechanics and Engineering, of which he is a consulting editor.

Professor Wang Bei Sheng, who has been engaged in research on the theory of secondary layers of atmosphere in high velocity; he has done extensive work in cultivation of research students for our country. He is currently assistant school administrator for Xi Bei Industrial Institute, a member of the Science and Technology Committee

of the Third Ministry of Machine Building, a member of the Standing Committee of the Chinese Navigational Science Committee, and a member of the Chinese Mechanical Sciences Committee.

*....* 

SECOND INVITATION ALL

Professor Hu Shi Xian, who is a specialist in structural mechanics, and has long been engaged in research on matrix calculation methodology in atmospheric motive force applications. He is currently a member of the Science and Technology Committee of the Third Ministry of Machine Building.

Professor Chen Bai Zhan, who has been engaged in research on casings and has made many contributions. He is a member of the Science and Technology Committee of the Third Ministry of Machine Building, and is an assistant administrator at Xi Bei Industrial Institute.

Professor Wang Shi Ji, who has long been engaged in theory on internal combustion for aircraft engines. He is Chief of the Aircraft Engine Department at Xi Bei Industrial Institute, a member of the Science and Technology Committee of the Third Ministry of Machine Building, and a member of the Standing Committee of the Chinese Thermophysics Engineering Council.

Professor Zhou Shao He, who has long been engaged in research on basic theories in foundry work. He has made many outstanding contributions. He received a National Discovery award for his design of "high temperature surface measurement device for foundries". He wrote the essay, "Theory of Heat Preservation Risers", which was read aloud at the 46th Annual International Foundries Technology Committee Meeting, and received the praise of the international committee members. In 1979, he was named a National Model Worker.

### DEPARTMENT OF SHIPBUILDING FACILITIES

Oceanographic Physics and its Applications Specialty Hydro-acoustic Physics and Hydro-acoustic Equipment Specialty Motive Force Engineering Specialty Shipyard Facilities Design Specialty Shipyard Facilities Automation and Control Specialty

## DEPARTMENT OF MATERIAL SCIENCES ENGINEERING

Metal Materials and Thermal Control Specialty Forging Engineering Specialty Foundry Engineering Specialty Welding Engineering Specialty Nonmetal Materials Science and Engineering Specialty

### DEPARTMENT OF AIRCRAFT

Aircraft Design Specialty Atmospheric Motive Force Science Specialty Aircraft Structural Mechanics and Reinforcement Specialty

### DEPARTMENT OF AIRCRAFT ENGINES

Aircraft Engines Specialty Aircraft Engine Assembly and Manufacture Engineering Specialty

## DEPARTMENT OF RADIO NAVIGATION ENGINEERING

Computer Control and Information Processing Specialty Electronic Computer Specialty Radar Specialty Navigational Fire Control Specialty Navigational Radio Technology Specialty Electronic Computer Software Specialty

## DEPARTMENT OF FLIGHT INSTRUMENT MANUFACTURE AND ENGINEERING

Aircraft Manufacture Engineering Specialty Navigational Machinery Manufacture and Engineering Specialty

## DEPARTMENT OF AUTO-CONTROLLED NAVIGATION

Navigational Gyroscopes and Inertial Guidance Specialty Instrument Flight Control Specialty Navigational Electronic Engineering Specialty Hydraulics Control and Operational Systems Specialty

## DEPARTMENT OF SPACE NAVIGATION

Flight Instrument Design Specialty Rocket Engine Specialty Automated Flight Control Instruments Specialty Flight Mechanical Sciences Specialty

### FOUNDATIONAL STUDIES SECTION

## Applied Mathematics Teachers Specialty General Mechanical Sciences Specialty

In 1980, there were 3900 undergraduate students in attendance and there were 180 research students going to the school. There is a total staff of 3532 teachers, workers and administrative personnel. Among the staff, there are 1382 teachers. Among the teachers, there are 37 professors, 135 assistant professors, 855 lecturers and 355 assistant teachers and teacher aides.

In aspects of scientific research, there are nine research centers that have been built, or are in the midst of construction. They are for material sciences engineering, aircraft structural reinforcement, ship design research and flight aerodynamics, aircraft engines, general mechanical sciences, wireless radio technology, automation and control, engineering plastics and applications, modern industrial arts, small pilotless aircraft drones and hydroacoustic engineering.

Since 1979, Xi Bei Industrial Institute has sent 32 outstanding professors abroad for advanced studies. At the same time, it also has sent many well known scholars and professors abroad to conduct investigations, participate in research, or to attend international technology conferences. In addition, there have been several liaison offices set up at various foreign universities.

Published materials include the Xi Bei Industrial Institute School paper which disseminates information on the school's accomplishments.

The school occupies an area of 1000 mu, and current campus constructed facilities occupy a surface area of over 280,000 square meters. There is a collection of over 800,000 publications in the library. The library has a surface area in excess of 8000 square meters, and the large building is provided to enhance conditions of study and reading for teachers and students.

The entire school has 49 experimental laboratories, and it has already created a computer center, an electronic classroom center,

and a measurements and calculations center.

Affiliated organizations include the school run machinery factory, an electronics instruments factory, both of which are responsible for supporting research and producing a limited quantity of products. In addition, they are provided to give students operational experience while still in school.

Since the establishment of Xi Bei Industrial Institute, it has produced a total of over 20,000 men and women talented in the sciences of advanced technology, all of whom are working in every area making their contributions towards our nation's "four modernizations" goal by giving their best efforts.

> Current school administrator: Wang Tan Party secretary: Kan Hai Bin

XI BEI TELECOMMUNICATIONS ENGINEERING INSTITUTE Campus Address: Tai Bai Road, Xi An City, Shan Xi Province

Ċ,

7

Xi Bei Telecommunications Engineering Institute was established in May 1952. It was the first institution of higher learning, in regards to electronic science and technology, established in our country after the liberation.

In its earliest stages, the school was Jin Cha Ji Telecommunications Engineering Institute, and it was established in Qu Yang County of He Bei on March 6, 1947. In June 1948, it merged with Jin Bi Lu Xiang Telecommunications Engineering Institute to form Hua Bei Vocational School of Telecommunications. The school's address was in Huo Ci County of He Bei Province. The school established courses in wireless radio engineering, wireless radio maintenance, cable communications and meteorological communications. The program of study was two years in length, and there were nearly a thousand students in attendance. Under extremely difficult circumstances during the month that the great struggle began, a great and glorious revolutionary tradition was started in order to cultivate talented men and women from the liberated regions in wireless and cable telecommunications technology.

In the summer of 1949, as the terrain throughout the entire country was being liberated, an engineering institute was established in Zhang Jia Kou City of He Bei Province in order to produce men and women talented in electronics engineering and foreign languages. Hua Bei Vocational School of Telecommunications merged with this school. It formed programs in wireless and cable telecommunications engineering, and the program of study was established to be four years in length.

In the beginning of 1952, the Department of Electric Motors and Generators of Da Lian Industrial Institute merged with the engincering school. In May of the same year, following the development

781

/251

of the educational cause, the engineering school was reestablished as two separate schools. They were the Foreign Languages Institute and Communications Engineering Institute. Foreign Languages Institute moved to Bei Jing. The Communications Engineering Institute remained at its address in Zhang Jia Kou, and it established the Department of Wireless Radio Engineering, Department of Cable Eingeering and Department of Radar Engineering. The programs were not broken down into specialties. The program of study was five years in length, and there were nearly 800 students attending the school.

In 1956, the school accepted 33 foreign exchange students. Additionally, in order to make preparations for specialties in electronic computers and automation and control, a small research section was established for automation and control studies.

In 1958, the school moved to Xi An.

Following along with the developments in electronics technology, new specialties were continually established at the school. By 1961, the school had gradually developed to become a telecommunications engineering institute with specialties established in telecommunications engineering, information theory, precise wireless radio measurement devices, radio and electric wave propagation, microwave technology, semi-conductor physics and components, radio components and materials, electronic vacuum tube components, radar engineering, electronic machinery fabrication and craftsmanship, wireless radio telemetry and wireless radio telecontrol. Among them, the last three specialties had programs of study that were six years in length. All of the other programs were five years in length. The school gradually became an institute for the production of cadre trained in wireless radio telecommunications and radio technology. It developed to become a multi-science school for the production of men and women who were talented in the electronics sciences and technologies.

In the beginning of 1962, several of the specialties were reorganized, and the school's name was changed to Telecommunica-tions Engineering Institute.

In April 1966, the name was once again changed to Xi Bei Telecommunications Engineering Institute.

Since the school's establishment, scientific research and technological exchange activities have been emphasized. In 1954, a research organization planning section was established--the Scientific Research Branch. In 1956, scientific research proposals were submitted to the institute, and research began on such areas as information theory, ultra high frequency technology, semi-conductors as well as various aspects of scientific and technological research in radars, systems of organization in communications and basic theories. In 1958, geranium monocrystals were extracted and purified from coal in a successful research project. Later, research was conducted on our country's first meteorological radar equipment. Research began on pulse and millimeter wave radar equipment for the nation. After 1960, the school developed research in systems of organization for short wave stream bed scatter communications and stream bed refraction communications, as well as research on the applications of infrared direction on target technology in operational aircraft. At the same time this was taking place, in regards to research in electronic computers and theory in automation and control technology, there were many favorable developments. In recent years, based on directives and policies issued by the party on the subject of science and technology, in order to fully bring into play all of the outstanding features of the school a reorganization orienting the school towards scientific research took place. In regards to the basic theories in applies sciences, and in regards to research in new technologies, this strengthened the school and, additionally, it gradually developed its own special and distinctive features.

The school was relatively strong on aspects of research regarding information and systems of organization, electromagnetic radiation and its transmission, antennas, computer software, complicated structures and improved designs, and automation and control. In these areas, the school has been considerably successful. Research on intrusive meteor communications equipment has also been successful. Research on radar target displays, radar chart/graph transmissions, structural designs for aircraft antennas and its theory, design of large scale array antennas and antenna systems, high speed, high voltage semiconductor comparison devices, etc., have all reached advanced levels of technology in the country.

The school also fully emphasizes research on modern equipment for industry, agriculture and medicine. In these areas its accomplishments have also been noteworthy. It has done research projects on such areas as coaxial cable malfunctions in electronic digital measurement devices, devices for the measurement of water in soil microwave analysis, electronic strobe laryngoscopes, polishing and buffing devices for dental treatment of cavities, biological dosages of ultraviolet rays and automatic measurement devices for such, constant temperature dryers and rust preventatives. All of these projects have reached levels of technology on an international scale, and some of the products have exceeded certain foreign product specifications. They have been warmly received by the industrial, agricultural and medical communities.

Scientific research leads to the development and establishment of specialties, and elevates the academic level of the instructors. In addition, it has led to the development of many significant contributions towards our nation's industrial enterprises. In the past few years, the school has achieved successful results in over 100 research projects. In the three years from 1978 to 1980, successful results were achieved on 72 research projects. Among these projects, five received National Science Committee Meeting awards, and 27 projects received awards from the Fourth Ministry of Machinery and

the province. The results of 53 projects are already being promoted for use. In the last two years, the teachers of the school have written 311 academic theses, and five of these were presented at international technology exchange conferences. The results of several successful research projects have been published in national electronics newsletters and other publicly distributed publications which help to enrich the content of teaching.

Following along with the development of scientific technology, and in order to keep stride with developments in academic and scientific research work, a majority of the teachers conduct research work and hold this to be their main task. The school has established a scientific information research organization, as well as five specialized research centers for communications systems, structural mechanics, automation and control, electronic resistance and information systems. At present, there is a staff of 114 fulltime researchers. These centers and organizations have gradually become a base for the production of research students at the school.

In the last two years, the school has also developed national and international activities for the exchange of technology. It has organized academic conferences, reporting committees and has asked internationally renown scholars to come to the school and lecture for short periods of time. Of course, the leaders and teachers of the school also participate in international technological conferences and exchange activities. The school has signed an agreement with several foreign universities, stipulating cooperation in the exchange of technology, and the establishment of friendly relations. During these two years, the school has sent over 20 teachers to foreign countries for advanced studies. In the course of international technological exchanges, improvement has been made in the quality of teaching and the academic level of teachers.

In the last 30 years, Xi Bei Telecommunications Engineering Institute has produced over 10,382 men and women talented in every area of electronics technology for the country. Development of specialties, buildings established, teaching resources, equipment and library have also grown on a comparable scale.

Currently, the school has six departments with 17 specialties, and the program of study is four years in length.

### DEPARTMENT OF INFORMATION ENGINEERING

Telecommunications Engineering Specialty Information Theory Specialty

### DEPARTMENT OF ELECTRONIC ENGINEERING

Radar Engineering Specialty Information Management Specialty Electronic Resistance Specialty

### DEPARTMENT OF COMPUTERS

Computer Engineering Specialty Computer Sciences Specialty Telecontrol and Telemetry Specialty

### DEPARTMENT OF ELECTRONIC MACHINERY

Radio Equipment Structural Design Specialty Electronic Precise Measurements Machinery Specialty

### DEPARTMENT OF TECHNOLOGICAL PHYSICS

Semi-conductor Physics and Components Specialty Laser Technology Specialty Infrared Technology Specialty

## DEPARTMENT OF ELECTROMAGNETIC ENGINEERING

Microwave Technology Specialty Antenna Specialty Electric Wave Propagation Specialty In addition, a foundational studies section has been established, and it offers a specialty in applied mathematics. In 1980, a new specialty in electronic intelligence science and technology was established.

In 1980, there were over 3800 undergraduate students in attendance at the school and there were 36 research students in attendance. The entire school has a staff of over 2626 personnel. Among them, there are 886 instructors. Among the instructors, there are five professors, 41 assistant professors, 518 lecturers, 113 assistant teachers and 189 teacher's aides.

In the establishment of the specialties, it has been most important to amass them in regards to electronics technology and information sciences. The school has established a fairly long history, and the types of courses offered are fairly abundant. Additionally, the school has developed towards the unification of science and industry. There is also a fairly good number of electronics technicians and specialists at the school. Over 65% of the teachers fall into this category. These personnel are generally mature, with good spirit and a relatively sound base in foundational theory, and have a good degree of experience. Many of the teachers are not only the backbone of academic teaching work, but are also some of the same ones that are making significant contributions in scientific research. There have been 15 teachers recommended to act as directors for various academic and scientific councils.

The school emphasizes the linking together of foundational theory with experimentation, studies, curriculum design, graduate designs, etc. It also emphasizes the teaching of students in the three aspects of morals, wisdom and the body in cultivating them for graduation. Historically, each new session of students has been stronger than the last, and the reaction to the spirit of work and the organizational atmosphere of the school has been generally good.



/253

1215

Students of Xi Bei Telecommunications Engineering Institute conducting an experiment on ultra-high frequencies.

The entire school occupies an area of 746 mu, and currently, campus constructed facilities occupy a surface area of over 230,000 square meters. In addition, there are plans under consideration for the construction of teacher and staff member dormitories, a hospital and teaching buildings.

At present, there are 29 experimental laboratories at the school and they are equipped with 5921 electronic devices of every type. The operational factories are equipped with every type of metal cutting machine, and over 200 types of forging equipment. There are electronic assembly shops that can accommodate 150 students at a time for instructional purposes. The printing house has the capability of producing over 15 million characters per year. The electronic classrooms are already equipped with color video recording equipment of various types. Their display system can accommodate 500 students at a time for closed circuit audio visual instruction. The library has a collection of 480,000 publications (among them, there are 320,000 Chinese and 160,000 foreign publications). In addition, the school also operates a television university and is affiliated with a middle school, an elementary school and a kindergarten.

> Commencement date: March 6 Current School Administrator: Lu Bai Party Secretary: Mo Ren Pu

XI BEI INSTITUTE OF LIGHT INDUSTRIES Campus address: Cheng Yang City, Shan Xi Province

The precursory organization to Xi Bei Institute of Light Industries was a department of Being Institute of Light Industries, which moved from Bei Jing to Cheng Yang in 1970 and merged with the Cheng Yang Institute of Light Industries, which was still in the planning stages. In 1972, the original Shan Xi Industrial College was abolished, and the spinning and weaving department of that school was merged with Xi Bei Institute of Light Industries. Towards the end of 1978, the spinning and weaving department was separated from the school and established as Xi Bei Spinning and Weaving Institute.

Planning for the original Cheng Yang Institute of Light Industires began in August 1968 under the auspices of the First Ministry of Light Industries. At that time, when the school was established, there was a staff of only 200 personnel, and preparations were made for the enrollment of students in 1966. These plans were never implemented because of the Decade of Turmoil.

The original Bei Jing Institute of Light Industries was founded in 1958. At that time, the school had established three departments with five specialties. They were: First and Second Departments of Light Industrialization, Department of Light Industries Machinery. Specialties were established for paper manufacturing, shoemaking, silicates (with subordinate specialties in ceramics and glassware), salt industries and light industrial machinery. The undergraduate specialties were organized to be four years in length, and vocational courses offered were two years in length (the programs of study for the majority of specialties were changed to five years in length in 1961, and the school stopped offering vocational courses). In 1959, a specialty in fermentation was added. In 1963, the specialty in fermentation was reorganized and merged with the Tian Jin Institute of Light Industries. In 1964, the paper manufacturing specialty of Tian Jin Institute of Light Industries was merged with Bei Jing Institute of Light Industries. In 1970, the specialty in salt industries was reorganized and moved to Tian Jin Institute of Light Industries.

and the set of the set

During the initial stages of establishment for the original Bei Jing Institute of Light Industries, the school developed fairly fast. During the first year, there were 307 undergraduate and vocational students enrolled. Besides the establishment of the required experimental laboratories, the school also established nine small factories for metal industries, ceramics, glassware, refractory brick manufacture, shoemaking and ethyl alcohol production. In regards to scientific research, the school conducted research on and test manufactured a miniature paper making machine and an electronic computer. Gradually, the scientific research at the school grew more successful.

The majority of strength in teaching at Institute of Light Industries came from personnel who had come from production or research departments in various light industries. Within the corps of teachers, many are personnel of the advanced technologies. They emphasize teaching the foundational theories, and are adept at organizing the links of teaching and research.

After the original Bei Jing Institute of Light Industries was established, it produced, in all, a total of 2505 undergraduate students for the country. Many among them have already become administrators, research and design specialists and cadre in light industries. Besides this, since 1966 there have been 49 foreign exchange students produced at the school.

Xi Bei Institute of Light Industries started enrollment of students in 1972. At that time, there was the First Department of Light Industries Machinization, the Second Department of Light Industries Machinization and the Department of Light Industries Machinery. There were five specialties established in shoemaking,

paper manufacturing, ceramics, glassware and light industries machinery. Since then, and up to the present time, the school has produced a total of 1294 students.

During the Decade of Turmoil, there was increased chaos in the course of several moves, and the school suffered heavy losses. Since the crushing of the Gang of Four, the school has endeavored to treat casualties of the Decade of Turmoil, and in almost every area of work, things are beginning to return to normal.

Xi Bei Institute of Light Industries is currently under the administration of the Ministry of Light Industries.

Currently, the school has established four departments with eight specialties.

FIRST DEPARTMENT OF LIGHT CHEMICAL INDUSTRIES

Paper Manufacture and Processing Specialty Shoemaking Specialty

SECOND DEPARTMENT OF LIGHT CHEMICAL INDUSTRIES

Ceramics Specialty Glassware Specialty

.....

57

 $\mathbb{R}^{n}$ 

### DEPARTMENT OF LIGHT INDUSTRIES MACHINERY

Light Industries Machine Manufacturing Specialty Light Industries Machine Design Specialty Clock and Watch Movement Specialty

DEPARTMENT OF LIGHT INDUSTRIES AUTOMATION Light Industries Automation Specialty

In addition, the school also runs two teachers' courses in drafting and mechanics, as well as an advanced course in experimental technology. In 1980, there were 1096 undergraduate students in attendance at the school. There was a staff of 864 personnel and among them, there were 324 instructors. Among the instructors, there were six professors, 10 assistant professors (including part-time and fulltime staff members), 131 lecturers and 177 teacher's aides and assistant teachers.

In recent years, especially since the start of National Science Committee Meetings, while at the same time trying to elevate the quality of teaching at the school, the school has also been active in scientific research work. In addition, the school has started to achieve some impressive results. Among these projects, two that have achieved international levels of technology are "Complex Analysis of Glutaric Acid and its Applications in the Shoemaking Industry" and "Molysite as a Substitute for Chrome Leathers". Two articles that have achieved national levels of technology are "A High Speed Device for Detection and Measurements of PH Levels in Leather" and "XO--100 Model Synchronous Speed Reduction Device". Two articles that have already had a very significant economic impact in industry include "Multi-variant Fourdrinier Machine and Silicon Controlled Rectifier Systems" and "Design of a Direct Conduction, Constant Temperature Blast Furnace". Besides these projects, some very impressive results have been achieved in research articles, such as "Paper Dryer Surface Temperature Measurement Devices", "Ceramic Scraper Plates for Paper Mills", "Microcrystalline Welding of Glass for Color Televised Kinescopes", "Utilization of Lithium Carbonates in Glassware" and "Thermoconductive Freezers". In constructing teaching materials, the school since 1977 has conducted work on 12 national level light industry teaching materials publications. Among them, those written solely by the school include "Assembly and Protection of Paper Manufacturing Apparatus", "Chemical Processing and Craftsmanship in Leather Industries" (2nd volume), "Glassware Craftsmanship" and "Ceramics Craftmanship". Teaching materials that the school has participated in writing include "Plant Fiber Chemistry", "Leather Processing Chemistry and Craftsmanship" (first volume), "Shoemaking Machinery and Equipment",

"Glassware Machinery", "Thermal Processing Equipment in the Ceramics Industry", "Ceramics Machinery", "Ceramics and Physics" and the jointly authored document produced by Zhong Na, Xi Nan and Xi Bei entitled "Teacher's Handguide to the Philosophy of Marxism".

The school library has a collection of over 400,000 publications. Among them, there are 30,000 foreign publications. There are subscriptions to 1500 different types of magazines and journals. Among these, over 300 publications are foreign editions.

The school is affiliated with a machine factory, a paper mill, a shoemaking factory, a ceramics factory and a printing house, five organizations in all. The school manages a child care center, a health clinic and a grade school with a 10-year program for our younger brothers.

The campus occupies an area of 180 mu and, currently, the campus construction facilities occupy a total surface area of over 51,000 square meters. At present, the school is being expanded.

Current School Administrator and Party Secretary: Gui Jun Mu

# XI BEI AGRICULTURAL INSTITUTE Campus Address: Yang Jiang District, Wu Gong County, Shan Xi Province

Xi Bei Agricultural Institute was the earliest known institute of higher learning for agricultural industries established in our country in the Xi Bei region. It is located in the Yang Jiang District of Wu Gong County in Shan Xi Province. It faces the waters of Lin Hua and lies between the Qin Mountain Range and Tai Bai Mountain that can be seen in the distance. This is the homeland of the god of the grains worshipped by the legendary monarchs Yao and Shun who ruled over the different nationalities of the Chinese people who sowed and reaped the grain.

The precursory organization to Xi Bei Agricultural Institute was the first nationally established Xi Bei Vocational School of Agriculture and Forestry which was built in the fall of 1932. It was officially founded in 1934. When the War of Resistance Against Japan erupted, the Agricultural Institute of Bei Ping University (Bei Ping University's Agricultural Institute was established in the 31st year of the Chinese calendar, or in 1905) moved to Shan Xi. In all, its name was changed to the nationally established Agricultural Institute of the Temporary Xi An University, the nationally established Xi Bei Allied Institute of Agriculture, and in April 1939, it merged with the nationally established Xi Bei Vocational School of Agriculture and Forestry. At that time, the Animal Husbandry and Veterinary Science Department of Agricultural Institute of He Nan University also merged with the school and, finally, it was established as the nationally established Xi Bei Institute of Agriculture.

After the merger which created Xi Bei Agricultural Institute, aside from the original six departments established in agriculture, forestry, horticulture, agricultural field water conservancy, animal husbandry and veterinary science, and agricultural economics, two

other specialties were added in agricultural chemistry and plant pestilence diseases (TN: error in original print, the word specialties should be departments). In 1964, two new departments were also established in agricultural machinery and agricultural products manufacturing, making a total of 10 departments, and it remained this way until liberation. In 1936, Xi Bei Institute for Botanical Investigations was established. In 1939, Xi Bei Experimental Center for Water Industries was established. Also established was an experimental farm for teaching purposes, comprising a total of over 7800 mu, and divided into agricultural fields, forests, stockyards, horticultural gardens and botannical specimen gardens. In 1949, there was an administrative staff of 608 personnel at the school and among them, 130 personnel were teachers (among the teachers, there were 44 professors, 11 assistant professors, 26 lecturers and 49 assistant teachers). There were 585 students in attendance.

In 1937, on the eve of the outbreak of the War of Resistance Against Japan, Xi Bei Agricultural Institute was a part of the Chinese Communist Party's organization. After the War of Resistance Against Japan began, a Resist the Japanese People's National Vanguard was established and it led students and teachers in their movements to resist the Japanese to save the nation. During the time that the Nationalist Party was replenishing their troops for the civil war, it conducted an opposition movement to prevent youth from entering the military and going to combat. In 1946, they conducted the struggles of the anti-hunger, anti-civil war and antipersecution movements. Additionally, on several occasions, large groups of revolutionary youth were transported to Yan An to support the revolution. In 1949, they carried out a struggle to protect the school, and welcomed in the liberation.

After the liberation in May 1949, Xi Bei Agricultural Institute began a new chapter in its history. In order to suit the needs of socialism and the requirements of agricultural development, the school

went through the national reorganization of institutions of higher learning, and the specialties of animal husbandry and veterinary science at Xi Bei Agricultural Institute were moved out and dispatched to Xi Bei Institute of Animal Husbandry and Veterinary Sciences. The school stopped managing the two departments of agricultural and agricultural products manufacturing. The Water Conservancy Department and all of the agricultural specialties of Lan Zhou University were reorganized into this school. In addition, with the support of Xi Bei Agricultural Institute, the Shan Xi Institute of Agriculture and Forestry, the Shan Xi School of Water Conservancy, the Shan Xi School of Agriculture and Forestry, the Chinese Academy of Science's Xi Bei Research Organization for Water and Soil Protection, the Chinese Academy of Science's Botannical Research Organization of Xi Bei, and, finally, the Shan Xi Province's Research Center for Agricultural Industries of the Wu Gong County region were established using this school as a foundation.

Since November 1950, in order to suit the pressing requirements that were established by the nation, there were three advanced studies sessions for the forestry industry clases that were held, as well as advanced studies programs in agriculture and agricultural field water conservancy. In May 1956, Xi Bei Agricultural Institute restored the two specialties in agricultural machinery and animal husbandry and veterinary science, and student enrollment officially began in 1957. In the same year, the specialty in agricultural field water conservancy was moved to Xi An Traffic and Transportation University and later, it moved to Shan Xi Industrial College. In 1958, preparations began for the establishment of specialties in hybrid breeding, plant physiology and growth, agricultural physics, electronics technology in agriculture, forestry and logging, wood processing chemistry and craftsmanship, and forest preservation. The specialty in agricultural field water conservancy was restored. Enrollment of students in these specialties actually began in 1960. In 1971, the Department of Water Conservancy of Shan Xi Industrial College was again merged with Xi Bei Agricultural Institute. In 1974,

a specialty in fixed hydroelectric power plant motive force equipment was established. Enrollment of research students was restored in 1959. At the same time, county level agricultural cadre leadership courses were being conducted as well as a vocational course for teachers in agricultural stock handling and a correspondence course in agricultural science.

Xi Bei Agricultural Institute has a tradition of diligent studies, discipline and plain and simple living. It emphasizes the unification of theory with practice, and has developed academic activities. On many occasions, teachers and students of Xi Bei Agricultural Institute have conducted investigative studies on agricultural production and resources for the Xi Bei region. At the same time, it has established the "Research Center for Ancient Agricultural Studies". It founded the "Xi Bei Agricultural Institute School Paper". Over the years, it has developed many scientific research projects, and it has achieved numerous successes. For example, research projects that the school has successfully accomplished include genetics for new types of wheat, maize, fruit and vegetables, control of insects that debilitate wheat plants, rules for the control of the spread of wheat rust, raising and breeding mountain sheep, rules for the transport of soil and mud, and ancient agricultural genetics. Several of these articles have reached comparatively high levels in academics, and have had significant impact on production. A particular type of wheat designated as Bi Ma wheat has, in the Huang He basin territory, been expanded in production to include a surface area of over 90 million mu. The high yield number three wheat has been expanded to a production area of over 30 million mu. Xi Bei Agricultural Institute has promoted the raising and breeding of mountain sheep in 23 cities and provinces. Simultaneously, 72 publications of every type have been published by the school promoting the agricultural industry, improving the quality and elevating the level of teaching.

In 1961, the original 18 specialties were reorganized to become 13 specialties. Students in the specialty of agricultural physics were placed in the agricultural machinery specialty; students in the specialty of agricultural electronics technology were placed in the specialty of agricultural field water conservancy; students in the specialty of plant physiology and growth were merged with the specialty of soil agri-chemistry; students in the specialty of hybrid breeding were merged with students of the plowing and tilling specialty at the agricultural institute.

During the Decade of Turmoil, the school was destroyed and enrollment of students stopped for more than four years. In 1971, the school became "coming socialism, going socialism" and "run the school from scattered locations"; it was completely ruined.

The Xi Bei Agricultural Institute is under the dual management and control of the Ministry of Agriculture and Xhan Xi Province, but primarily run by the Ministry of Agriculture. It is a school established for the nation, but special emphasis is placed on the Xi Bei region.

ي. يور ا

At present, the school has established nine departments with 14 specialties. The program of study is four years in length.

DEPARTMENT OF AGRICULTURAL SCIENCES

Agricultural Sciences Specialty

#### DEPARTMENT OF SOIL AGRI-CHEMISTRY

Soil Agri-chemistry Specialty

DEPARTMENT OF PLANT PROTECTION

Plant Protection Specialty

#### DEPARTMENT OF HORTICULTURE

Fruit Specialty Vegetable Specialty

### DEPARTMENT OF AGRICULTURAL ECONOMICS

Agricultural Economics and Management Specialty

#### DEPARTMENT OF AGRICULTURAL MACHINERY

Agricultural Machinery Design and Manufacture Specialty Agricultural Mechanization Specialty

DEPARTMENT OF ANIMAL HUSBANDRY AND VETERINARY SCIENCE

Animal Husbandry Specialty Veterinary Science Specialty

#### DEPARTMENT OF WATER CONSERVANCY

Agricultural Field Water Conservancy Engineering Specialty Water Conservancy Engineering Construction Specialty Hydro-electric Station Motive Force Equipment Specialty

#### DEPARTMENT OF FORESTRY

Forestry Specialty

In 1980, there were 2178 undergraduate students in attendance and there were 40 research students. The number of staff personnel had reached 1758 and among them, 637 personnel held teaching positions. Among the teachers, there were 22 professors, 64 assistant professors, 297 lecturers, 72 assistant teachers and 182 teacher's aides.

There are 62 research sections (or centers) established among the basic studies section and each department.

In October 1979, the Department of Forestry separated from Xi Bei Agricultural Institute and, in its location, established Xi Bei Institute of Forestry.

Since 1977, the program of study has been restored to four years. Since 1978, research students have been enrolled in two and three

year programs of study. In order to strengthen studies in the foundational theories, a special foundational studies section was established. Additionally, the experimental laboratories have also been heavily replenished.

•

In aspects of scientific research, the school has established the Research Center for Hybrid Wheat, Research Center for Raising and Breeding Mountain Sheep, Research Center for Insect Taxonomy and Morphology, Research Center for Agricultural Field Ecosystems, Research Center for Plant Physiology and Growth, Research Center for Endocrine Studies in Domesticated Animals, Research Center for Agricultural Economics, Research Center for Ancient Agricultural Studies, Research Center for Stock Breeding and Xi An Water Conservancy and Hydroelectric Sciences Research Organization. At the National Science Committee Meeting held in March 1978, Xi Bei Agricultural Institute received 13 scientific awards; 38 awards were received at the Provincial Science Committee Meeting. Professors Yue Gong Jiang and Zhou Shao received the glorious titles of National Model Worker. In 1979, the School Paper for Insect Taxonomy was founded. In 1980, Xi Bei Agricultural Institute developed research work on 41 projects and 132 task problems. Among them, 93 were provincial or national committee projects or tasks that the school assumed responsibility for.

AND THE PARTY OF T

The school has 95 experimental laboratories and there are over 7056 instruments (devices). After smashing the Gang of Four, the school was given amino acid analysis devices, atmospheric colorimeters, ultraviolet spectrometers and large model research microscopes, hypervelocity centrifugal devices and other precision instruments for use in their studies and research.

The school library currently has a collection of 520,000 publications and there are over 80,000 types of national and foreign periodicals. Within the library, every type of reading room has been established and provided for the student's use. There are reading rooms for teachers as well.



A view of the library of Xi Bei Agricultural Institute from the outside.

The school occupies an area of 765 mu and, currently, campus constructed facilities occupy a total surface area of over 120,000 square meters.

Xi Bei Agricultural Institute has, in all, received many of the country's agricultural scholars and scientific delegations who have participated in visits and given lectures. They have also sent a large quantity of professors and lecturers abroad for advanced studies, investigations, lectures, etc. In recent years, the school has started to send foreign exchange students abroad. These exchange activities have improved teaching and scientific research work at the school.

Since the liberation, Xi Bei Agricultural Institute has produced for the country over 10,000 students. Most of them have become the core of strength in agricultural industries technology. They have made many valuable contributions in the socialist revolution and the struggle to establish socialism in our country.

School commencement date: April 20 Current School Administrator and Party Secretary: Kan Cheng Jiu

/257

# YAN AN UNIVERSITY Campus Address: Yang Jia Ridge, Yan An City, Shan Xi Province

The Yan An University was founded in September of 1958. The campus is located on Yang Jia Ridge in Yan An City of Shan Xi Province. The school started with three departments in Chinese, mathematics and science and chemistry with programs of study two years in length. In 1959, a Department of Medicine was added with a five year program of study. In 1960, the Science and Chemistry Department was split into the Department of Physics and Department of Chemistry. In 1963, the two year programs of study in the Department of Chinese, Department of Mathematics, Department of Chemistry and Department of Physics were changed to four-year undergraduate programs of study.

During the initial stages of establishment, Yan An University was subordinated administratively to the Prefectural Commissioner of Yan An. In 1964, the school reverted to the administrative control of Shan Xi Province.

In the beginning of the school's establishment, the entire school had only 32 teachers and 232 students. The school facilities were at best simple and crude, as there were only 89 cave dwellings (TN: for the people to live in). In 1966, the number of teachers grew to 114 and there were 580 students in attendance. The school had built facilities occupying a total surface area of 18,300 square meters.

Yan An is a shrine for our nation's revolution. The Party and the government take very good care of Yan An University. Individuals such as Xin De Huai, Chen Xiang, Ye Jian Ying, Na Mo Zhu and Wang Ren Chong have visited the school or assisted in its administration. Several foreigners have also come to Yan An University to visit, participate in conferences, lecture or conduct investigations, and

this has greatly encouraged teachers and students. The school frequently conducts training seminars for teachers and students on the traditions of the hard and bitter struggles in the revolution. This serves to promote conventions and traditions established by Yan An University in the revolution. The school is managed with discipline, a difficult program of study and a conscientious teaching staff. From 1958 to 1965, Yan An University enrolled a total of 1305 personnel. After graduating, the majority of them can easily find positions of responsibility in their work, and some have even become cadre or teachers forming the core of strength in the realm of teaching in Chinese schools.

The school was unable to enroll students for seven years, from 1966 to 1972, because of the Decade of Turmoil.

In September 1971, Bei Jing Agricultural College moved from Beijing to Yan An and merged with Yan An University. The name of the school was still Yan An University. Taking agriculture as its primary consideration, it also established departments in teaching and medical care, as well as the original departments of Bei Jing Agricultural College and the original Yan An University. In April 1973, Bei Jing Agricultural College moved to Jia County in He Bei, and the original components of the Yan An University remained as they were.

In 1973, each department of Yan An University restored the enrollment of students. There were five departments in Chinese, mathematics, physics, chemistry and medicine. The program of study was three years in length. In addition, training classes and advanced studies courses were offered in government teaching, Chinese, English and nursing.

In 1977, following along with the revision in the educational system, Yan An University restored the programs of study to what they were prior to the year 1966. In addition, a Department of Government Education was established. In 1978, with the approval



/259

Yan An University's student dormitories--cave dwellings

of the State Council, the Department of Medicine was independently established, but it did not move from its location at the school and books were loaned to it on consignment from Yan An University.

Currently, Yan An University has five departments established. They are Chinese, mathematics, physics, chemistry and government education. The program of study is four years in length for each department.

In 1980, there were 777 students in attendance at the school and there was a staff of 477 personnel. Among the staff members, 155 held positions as teachers. Among the teachers, there were four assistant professors, 45 lecturers, 11 assistant teachers and 95 teacher's aides.

A CARGARES

In recent years, especially since the 11th Session of the Party's National Committee was convened, Yan An University has had many new developments and changes. There has been a definite raise in the quality of teaching at the school. The school has implemented the wise policies of the party, and the regulations of the cadre have been implemented; the four basic principles have been carried out at the school and the responsibilities of education have been

given full scope. Among the students, a changed school spirit, reflecting the "Study from Lei Feng, establish the three goods" attitude that has helped to elevate the level of activities at the school. By following the party's line of thought in establishment and organization, the school has cultivated and chosen a group of outstanding teachers and youth to serve as leaders of the school or serve as department chiefs. In teaching, the principle of setting teaching as the primary consideration has been implemented. The school has gradually established a very stable staff of teachers and it has been discovered that they are very conscientious in preparing for their classes and teaching them, and create a very hard working atmosphere for their students. People from among the staff have, in addition, been selected to go abroad for advanced studies or other types of learning in its various forms. Within the organization, the elder instructors and the younger instructures work and study together in the teaching duties, and this strengthens the establishment of the teaching corps.

In order to ensure the prominence of teaching at the school, many very significant scientific research activities have been developed. The atmosphere of academic research at the school is very brisk. In 1979, school and departmental academic committees were established. In recent years, teachers have written over 60 types of academic essays and teaching materials, and among them three received commendations from Shan Xi Province. In addition, the school has edited over 25 types of teaching materials, and is in the midst of publishing three textbooks, of which 60,000 editions will be distributed. The academic organizations of the school include the Yan An University Committee for the study of Natural Dialecticism. In 1979, the school started the publication of the "Yan An University School Paper" and four editions have already been published.

The school library has, at present, a collection of 300,000 publications. Among them, over 50,000 are foreign publications. In addition, there are more than 500 types of magazines and periodicals available. 805 The entire school occupies an area of 150 mu. Campus constructed facilities occupy a surface area of over 37,000 square meters. At present, the school is in the midst of constructing a new library and dormitory facility for the staff and workers that will occupy a surface area of over 8000 square meters.

Affiliated organizations include: a factory, a middle school, an elementary school and a child care center.

Since the founding of Yan An University up to the present time (a total of 22 years), the school has produced 1965 graduates for the country. Among them have been 815 undergraduate students and 1150 vocational students. In addition to this, the school has produced from its advanced studies and seminar training programs more than 1352 students. In order to enhance the cultural education of Shan Xi Province, especially the northern region of Shan Xi, the Medical Care and Treatment Section has made many valuable contributions.

Current School Administrator and Party Secretary: Zhang Cun Wu

# GAN SU PROVINCE LAN ZHOU UNIVERSITY

Campus Address: Tian Shui Road Lan Zhou City, Gan Su Province

The precursory organization to Lan Zhou University was Gan Su Public Law and Government Specialist's School, which fell under the control of the Law and Government Academy in July of 1913.

The Law and Government Academy was an official Mandarin school established in the prefecture of Lan Zhou City under the control of the Public Examiner's Bureau (for 15 consecutive years) in 1889. The school taught the laws and statutes of the Mandarin government. In 1900, the academy became an institute of law and was later changed to become a Mandarin law study institute. In 1909 (proclaimed the first year of reign of the new emperor), the institute became the Law and Government Academy. In July 1913 (the second year of the Nationalist government), the Law and Government Academy fell under the organization of the Gan Su Province and became the Gan Su Public Law and Government Specialist's School.

In April 1928, Gan Su Public Law and Government Specialist's School was reorganized to become a university and was designated as Zhong Shan University of Lan Zhou.

After Zhong Shan University of Lan Zhou was established, it was separated into three institutes, Institute of Law, Institute of Literature and Institute of Education. There were over 180 students in attendance. In February 1931, Zhong Shan University of Lan Zhou became Gang Su University. In March 1932, it was again changed to Gan Su Institute. There were three departments established in history and literature, law and education. There were four vocational studies sections established in agriculture, horticulture, medicine and banking. The school moved from its old address in western Gan Su to the site of the ancient imperial court at Za Ying Gate in northern Lan Zhou. For nearly 20 years that followed, there were no significant changes and the school produced a total of over 380 graduates.

In August of 1946, the Lan Zhou Branch School of Xi Bei Medical Institute merged with Gan Su Institute and created the establishment of the nationally established Lan Zhou University. Four institutes, literature and science, law, medicine and veterinary science, were established. After a five-month period, the veterinary institute became an independently established organization. The Literature and Science Institute was split up, and this still left four institutes with 13 specialties established in Chinese literature, history, mathematics, chemistry, physics, zoology, botany, geography, law, government, economics, government economics and banking and accounting (the Medical Institute was not separated into departments) as well as three vocational courses in judicial administration, Russian, both common and specialized. There was a total of over 1150 students.

Lan Zhou University has a glorious revolutionary tradition. Of special note, in March 1949, the opposition to the Nationalist government banks that incurred a public debt of over 300 million yuan (a public debt brought about from making "wild speculations"), and this brought out the socialist masses of every level who gave their extensive support in the struggle. On the eve of liberation, the school cooperated with the People's Liberation Army by allowing them to utilize the school facilities as a base of operations to maintain iron-fisted control of the Huang He territory. The enemy was smashed in their futile conspiracy to attempt to flee through Qing Hai. This strengthened the support for Lan Zhou and Xi Ning in their struggle for liberation. Teachers and students of Lan Zhou University and Communist Party members, such as Chen Shan Zhou, Chen Wan Li and Gui Na, as well as many others, made many significant contributions towards the cause of the People's Liberation of China, and seven patriots made the ultimate sacrifice by giving their lives to this cause.

After Lan Zhou was liberated on August 26, 1949, in order to suit the economic needs and requirements for the establishment of socialism, an institutional reorganization was conducted in 1952. The Department of Law and Department of Government were abolished, and they merged with the Department of Economics. The Department of Zoology and Department of Botany were abolished and a Department of Biology was created. Also, the Department of Chemical Engineering merged with Xi Bei Industrial Institute. The Department of Water Conservancy merged with Xi Bei Agricultural Institute. The Department of Russian Language merged with Xi Bei Russian Language Institute. The Department of English Language merged with Xi Bei University. The Department of Minority Languages merged with Xi Bei Nationalities Institute.

In 1954, the Medical Institute separated from the school and became an independently established school. It has developed to become the current Lan Zhou Medical Institute. After going through the institutional and departmental reorganizations, Lan Zhou University has become a multi-science, integrated institution of higher learning.

In August 1955, the school moved to the new campus built on Tian Shui Road.

Since 1955, the leadership and teaching strength at Lan Zhou University has been continuously improved, especially after Jiang Jiang Ji assumed duties as school administrator and party secretary in 1959. Within a short period of only seven years, Lan Zhou University had vigorously developed, stabilizing and solidifying its work in academics and research. This has brought about major developments and changes in every aspect of work at Lan Zhou University.

During the Decade of Turmoil, the school was completely destroyed and student enrollment ceased for over four years. In 1978, Lan Zhou University was placed under the administrative control of the Ministry of Education.

At present, the school has established 12 departments with 24 specialties. The program of study is four years in length.

DEPARTMENT OF CHINESE LITERATURE

Chinese Language and Literature Specialty

DEPARTMENT OF HISTORY

History Specialty

#### DEPARTMENT OF ECONOMICS

Government Economics Specialty Economics Management Specialty

#### DEPARTMENT OF PHILOSOPHY

Philosophy Specialty

#### DEPARTMENT OF FOREIGN LANGUAGES

English Language and Literature Specialty Russian Language and Literature Specialty

DEPARTMENT OF MATHEMATICS AND MECHANICS

Mathematics Specialty Mechanics Specialty Computer Mathematics

# DEPARTMENT OF PHYSICS

Physics Specialty

#### DEPARTMENT OF MODERN PHYSICS

Atomic and Nuclear Physics Specialty Radiation Chemistry Specialty DEPARTMENT OF WIRELESS RADIO PHYSICS AND COMPUTER SCIENCES

Wireless Radio Physics Specialty

DEPARTMENT OF CHEMISTRY

Chemistry Specialty

## DEPARTMENT OF BIOLOGY

Botany Specialty Zoology Specialty Cellular Biology Specialty Plant Physiology Specialty Biochemistry Specialty

#### DEPARTMENT OF GEOLOGY AND GEOGRAPHY

Natural Geography Specialty Geology Specialty Meteorological Sciences Specialty Hydrology and Engineering Geology Specialty

Since 1978, each department has restored the enrollment of research students. The programs of study for research students are divided into three types, being either four, three or two years in length.

In 1980, there were 3716 undergraduate students and 227 research students in attendance at the school.

Based on the established requirements of the "four modernizations", the school has also conducted professional management and cadre training classes as well as advanced study course in library sciences and research technology. The school has trained management personnel in the fields of library sciences, economics and technology.

Lan Zhou University is affiliated with a night university, and this affiliation began in 1958. Because of the Decade of Turmoil,

the night school had been closed down. In September 1980, student enrollment was restored. At present, it has established four specialties in mathematics, Chinese language and literature, foundational theories of Marxism and English. There are a total of 318 students in attendance. There are two types of programs of study, one is four years in length, the other is three years.

Currently, the whole school has a staff of 2135 personnel. Among the staff, there are 999 teachers. Among the teachers, there are 23 professors, 39 assistant professors, 550 lecturers, 102 assistant teachers and 285 personnel in non-titled staff positions.

In order for the school to build a teaching center and a research center, in recent years Lan Zhou University has emphasized the strengthening of the foundational theories in teaching, as well as basic experimentation training classes. This has strengthened the building of teaching resources and improved or elevated the quality of the teachers from within the corps of instructors. Additionally, based on the requirements for development of the sciences, and based on the requirements of the "four modernizations", as well as taking into consideration the teachers and the condition of the equipment and facilities, a very active reorganization of most of the specialties has taken place. Again, based on the principle of "doing it right and avoiding shortcuts", academic and scientific research work also underwent reorganization. This has brought into full scope, and better emphasized, the unique characteristics of the school. Of special importance is the manner in which this has integrated all of the scientific disciplines in regards to research work. This integration has brought the school to the brink of integrating even newer sciences in its work.

Since 1977, the school has either restored or established the following research centers or organizations in: organic chemistry, atomic and nuclear physics, plant physiology, cellular biology, theoretical physics, electromagnetic sciences, mathematics, rare

earth elements, chemistry and environmental sciences, cryptopedology, the Dun Huang caves (TN: these caves date back to 336 A.D., and have Buddhist frescoes, manuscripts, etc., within), population theory, advanced education and the history of Sino-Soviet relations.

In the school's teaching and scientific research work, although there is a definite division of labor, there is also unity of effort. The professional staff of teaching personnel (taking into consideration primarily those teachers above the level of lecturer) number about 400, and part of them are engaged in teaching, while the others are engaged in scientific research work. There is a professional staff of researchers numbering over 120 personnel in strength. Although they consider scientific research work to be their primary task, they also undertake a portion of the teaching load. This tends to "unit the departments with the organization" and "unite teaching with scientific research work". The establishment of these types of conditions enables teaching and scientific research work to mutually improve, and to collectively advance. The Lan Zhou University, in regards to scientific research and teaching in areas, such as atomic and nuclear physics theory, cellular biology, plant physiology, theoretical physics, hydrology and engineering geology, organic chemistry, analytical chemistry, differential slope equations, non-linear functional analysis, history of land systems and control, the Dun Huang caves, astrophysics, cryptopedology and the history of Sino-Soviet relations has created its own unique and distinctive characteristics.

In recent years, many research articles have had relatively good success, and several of them have reached national and international levels of technology. There were 25 commendations received at the 1978 National Science Committee Meeting. In 1980, four projects received commendation from the Science Committee of the State Council and the Ministry of Chemical Industries. Since 1979, over 613 research articles have been published in national

and international journals or other publications. At the National Discussion Meeting on International Academics and Sciences, 380 research articles were read aloud. The school has also restored an annual scientific reporting committee, which issues reports and essays that have been produced throughout the past year.

Every quarter, the Social Science and Natural Science sections of Lan Zhou University each publish a school paper for national distribution.

The library currently has a collection of over one million publications. Among these publications, over 780,000 are textbooks and there are over 200,000 periodicals. There are 326 maps and charts of every type available. There is a 7776 square meter main library with five stories, and it has the capacity to seat over 600 people in its various reading rooms. In addition, each of the 12 departments has a departmental resource center where relevant publications and periodicals are stored. Each is provided with reading rooms for the teachers and students to use in their work.

At present, the whole school has 109 experimental laboratories equipped with 12,700 types of instruments (or devices), and in addition, there are 102 large scale precision measurement instruments. There are over 200 pieces of research equipment for use by all the sciences. Since liberation, the amount of research equipment and facilities available at the school has increased to 500 times the pre-liberation era.

The campus of Lan Zhou University occupies an area of 683 mu, and at present, campus constructed facilities occupy a total surface area in excess of 160,000 square meters. Currently, the school is in the midst of constructing a teaching building for literature and science, student dormitories, and staff and worker dormitories. In the last 30 years, Lan Zhou University has undergone significant and profound changes in every respect. It has produced over 11,530 talented men and women for the country. They are in every area of the front lines, making their individual contributions towards the establishment of socialism in the socialist revolution.

.

Current School administrator and Party Secretary: Liu Bing



NING XIA HUA AUTONOMOUS REGION

NING XIA UNIVERSITY Campus Address: Ning Xia Hui Autonomous Region, Yin Chuan City, Xin Shi Region

The precursory organization to Ning Xia University was Ning Xia Teachers Institute, founded and established in the Ning Xia Hui Autonomous Region in 1958. At that time, there were three specialties established. They were Chinese, History and Mathematics. During the initial stages of establishment for the school, classrooms, dormitories and experimental laboratories were crude and simple, and the library was lacking in resource materials. There were only 40 teachers and staff members. The school was, on the one hand, enrolling students and, on the other hand, building itself up. In this manner, it gradually began to develop.

In 1958, aside from Ning Xia Teachers Institute, Ning Xia Medical Instute and Ning Xia Agricultural Institute were also established. In 1962, Ning Xia Teachers Institute merged with Ning Xia Medical Institute and Ning Xia Agricultural Institute to create Ning Xia University. The university established 10 departments in mathematics, physics, chemistry, history of government, Chinese, foreign languages (Russian), medicine, agriculture, veterinary science and forestry. There was a total staff of 577 personnel, and among them, there were 355 teachers. There were 1217 students in attendance. In addition to this, in the same year, the first session of local graduates, numbering 162 personnel, were produced. In the fall of 1963, three departments, the Department of History of Government, the Department of Foreign Languages and the Department of Forestry, ceased to be managed. Students in the two departments of history of government and foreign languages who were in their fourth year, were placed in Gan Su Teachers College, and graduated in the fall of 1964. By 1965, the school had grown to have a staff of 618 personnel, and among them, 291 people held positions



A view of Ning Xia University as seen at night.

as teachers. There were 995 students in attendance. In 1971, the Department of Medicine, Department of Agriculture and Department of Veterinary Sciences separated from the school. Ning Xia Medical Institute was restored, as was Ning Xia Agricultural Institute. Ning Xia University retained only the original teaching specialties.

During the time of the Decade of Turmoil, the school received heavy damage and was completely destroyed. Student enrollment ceased for more than six years.

From 1972 to 1976, there were five sessions of students enrolled in the departments of mathematics, physics, chemistry, Chinese and government history. In 1976, three new specialties were added in machine manufacturing, electronics engineering and chemical engineering. In addition, the specialty in foreign languages (English) was restored. The program of study was for three years.

The school set a fine example during the great resistance, urging students and teachers to remain loyal to the border region. They persevered in the bittle struggle, students studied diligently and lived plainly and simply. Under less than superb study conditions, and under work conditions that were lacking at best, the school worked collectively for 22 years, and for the country it produced many middle-school teachers and talented men and women who were trained in other specialties.

In regards to scientific research work, in 1969 a portion of teachers and students in the Physics Department produced a crystal tube black-and-white television. Teachers in the Mathematics Department worked in cooperation with a unit of Yin Chuan Fiber Spinning and Weaving Factory, and in 1975, they test built a successful model of the DS-408 Jacquard Weave, woolen blanket, logic machine loom. A portion of the instructors from the wireless radio factory, along with workers and cadre, began in 1971 to test produce electronic machinery protection devices and, in 1975, they successfully produced 751 of these types of devices which were very reliable, simple in design, low cost and efficient. This research project, along with the one on the Jacquard Weave, woolen blanket, logic machine loom, both received commendations from the National Science Committee Meeting. In literature, teachers have also written many articles and essays that have reached a very high level in technology. Some of the materials published include "Dialectical Materialism", "A Compendium of the Poetry of Chairman Mao Ze Dong", "Logic of Mechanical routines" and "A Contrast of the Ning Xia and the Common Dialect in Regards to Law", as well as 20 or 30 other works.

ANALY ANALY ANALY ANALY ANALY

In the last two years, the current assistant administrator of the school, Assistant Professor Wu Jia Wu, has written books, such as "The Logic of Mechanically Performed Routines", "A Public Demonstration and Explanation of Logic", and "Maintaining Law and Authority in the Establishment of a Totally Democratic System of Government", which was an essay. In addition, he has participated in the editing of over 100 texts produced nationally.

In actuality, at present Ning Xia University is a teachers' college. Currently, it has eight departments in mathematics,

physics, chemistry, Chinese, government, history, foreign languages and physical education. There are two specialties, biology and geography, that are in the midst of establishment. Aside from the Department of Foreign Languages specialty in English, the specialties of the other departments are not differentiated.

The length of the undergraduate program of study has since 1977 been restored to four years in length. In 1978, enrollment of research students began and the length of their program of study is two years or three years, depending on the program.

In 1980, there were 1789 undergraduate students in attendance at the school. There were 40 people in a preparatory course for nationalities and there were 22 research students enrolled. There was a staff of 714 personnel, and among them, there were 331 teachers. Among the teachers, there were four assistant professors, 123 lecturers and 204 assistant teachers and teacher's aides.

In regards to scientific research work, the school has established five research centers for basic particle technology and application, electronics technology and application, ground acoustics, literature of the Hui nationality and local history, as well as a research committee for natural dialecticism studies. It has begun research activities in preparation for accepting responsibilities for accomplishment of research missions. Additionally, a committee on academics has been established.

The school currently publishes the Ning Xia University School Paper.

At the present time, the school has 15 experimental research laboratories. They are equipped with surface grating spectrographs, large model prismatic spectrographs and every type of oscillograph. Besides this, the school has a completely equipped color video

recording facility and specialized electronic classrooms for teaching and developing academic activities.

The school library has a collection of over 260,000 publications, and it has 909 different types of periodicals available.

The school manages an experimental factory (including machine shops and a crystal tube shop), a printing house and, in addition, is affiliated with a middle school.

The school campus occupies an area of 345 mu, and current campus-constructed facilities occupy a surface area of 45,900 square meters.

The school is under the administrative control of the People's Government of the Ning Xia Hui Autonomous Region.



17

Contraction of the second s

XIN JIANG UYGUR AUTONOMOUS REGION XIN JIANG UNIVERSITY Campus Address: Xin Jiang Uygur Autonomous Region, Urumuqi, Nan Liang



Xin Jiang University

The precursory organization to Xin Jiang University was Xin Jiang Institute, formed in 1935 from the original Russian Literature and Law Specialist's School, managed by the Prefectural Commissioner Sheng Shi Cai. There were two departments, in law and government, established as well as an advanced studies course in taxation. From 1936 to 1939, the school added the Department of Education, Department of Literature and Department of Science and Industry. In 1939, the school's location was moved to Nan Liang of Urumuqi. In 1941, the school became affiliated with a middle school, and added two advanced studies programs in agricultural arts: animal husbandry and veterinary science. In September 1942, Sheng Shi Cai publicly opposed communism, and had the region's communist party leaders, Chen Ji Qiu, Mao Ze Min and Lin Ji Lu, arrested. In addition, on September 27, 1943, Ye Jia Yi was killed; from that point on, Xi Jiang Institute fell under the White Terror (TN: a local name given to the period of terror at that time). In 1944, the counter-revolutionaries of the Nationalist Party replaced Sheng Shi Cai. They instigated many incidents among the

nationalities and thus fabricated their separation. By the winter of 1945, Xin Jiang Institute had only five first year civil engineering students left and, in reality, had already closed down. In 1946, after Bao Er Ha assumed duties as the Administrator of Xin Jiang Institute, the school began to gradually be restored. On September 25, 1949, Xin Jiang became peaceful and liberated. At that time, the entire school had only 379 students.

After the liberation, President Zhou En Lai issued an important directive in regards to bettering the management of Xin Jiang Institute. He greatly expanded the facilities of the school, purchased equipment and the institutional reorganization was carried out. By 1953, the school had established eight departments in education, biochemistry, mathematics, history, literature, agriculture and forestry, animal husbandry and art. There were 14 specialties. In 1955, with the approval of the State Council, plans were made for the conversion of Xin Jiang Institute into Xin Jiang University, and in the same year, a planning committee was established. In 1958. the two departments in agriculture and forestry and animal husbandry were taken and merged with the 81st Agricultural Institute. The Art Department separated from the school and became an independently established institution. In the fall of that year, construction began on a new campus for Xin Jiang University. The school's address was established in the Second Battalion region of Li Yu Mountain. On October 1, 1960, Xin Jiang University was officially established. In all, there were 11 departments established in machinery, electric motors and generators, chemical industries, ground construction, mathematics, physics, chemistry, biology, language and literature, geography and history.

In 1962, Xin Jiang University merged with Xin Jiang Teachers Institute to create a new Xin Jiang University. The Departments of Machinery and Electric Motors and Generators were merged with the Metallurgical Institute. By 1966, the number of students in attendance at the school had grown to 2226, and among them, there were 1087 minority students, or 48.8%.

During the Decade of Turmoil, student enrollment stopped for more than six years. In 1972, student enrollment was restored. In 1973, a department in history was added, as well as preparatory studies section. In 1976, the Chinese department was divided into the Department of Chinese Literature and Department of Chinese Language. In 1980, a Department of Law was added. At the present time, the school has 11 departments and one preparatory studies section established. It has become a university integrated with literature and science on a progressive scale.

In the past 30 years, the school has produced over 12,000 talented men and women in every field (among them, more than 60% minorities). It has become a major factor in strengthening socialism in Xin Jiang. At present, there are students of 15 minorities studying at Xin Jiang University. They are of the Han nationality, the Ha Sa Ke nationality, the Hui nationality, the Xi Bo nationality, the Meng Gu nationality, the Zang nationality, the Wu Zi Bie Ke nationality, the Ta Ta'er nationality, the Ke'er Ke Zi nationality, the Ta Ji Ke Nationality, the Man nationality, the Da Wo'er nationality, the Zhuang nationality and the Miao nationality. Based on the unique characteristics of the many nationalities at Xin Jiang, Xin Jiang University has very thorough and ongoing studies in literature - the science departments are well managed, and this serves to suit the needs of development in the industrial sciences, and to produce talented men and women of the various minorities for such industry.

Currently, the school has 11 departments with 19 specialties. The program of study is four years in length.

DEPARTMENT OF GOVERNMENT

Government Specialty

DEPARTMENT OF HISTORY

History Specialty

#### DEPARTMENT OF LAW

NE.

Law Specialty

#### DEPARTMENT OF CHINESE LITERATURE

Chinese Literature Specialty Uygur Literature Specialty

# DEPARTMENT OF CHINESE LANGUAGE

Chinese Language Specialty Uygur Language Specialty Ha Sa Ke Language Specialty

## DEPARTMENT OF FOREIGN LANGUAGES

English Language Specialty Russian Language Specialty

# DEPARTMENT OF MATHEMATICS

Mathematics Specialty Computer Mathematics Specialty

#### DEPARTMENT OF PHYSICS

Physics Specialty Wireless Radio Electronics Specialty

#### DEPARTMENT OF CHEMISTRY

Chemistry Specialty Analytical Chemistry Specialty

#### DEPARTMENT OF BIOLOGY

**Biology Specialty** 

# DEPARTMENT OF GEOLOGY

Natural Geography Specialty Land Hydrology Specialty In 1980, there were 3154 undergraduate students in attendance, and among them were 1728 minority students, or a 54.7% minority ratio in the school. There were 35 research students in attendance and among them, there were 11 minority students, or a 31% ratio. At present, there is a staff of 1413 workers and among them, there are 556 minority workers, or a 39.3% ratio. Currently, among the staff are 627 teachers, and among the teachers are 258 minority instructors, or a 41.1% ratio. Among the teachers are 36 assistant professors (and among them are 8 minority professors), 323 lecturers (142 of which are minorities), 115 assistant teachers (46 of which are minorities) and 153 teacher's aides (62 of which are minorities).

There are 10 research centers established. They are: Research Center on Literature of the Minorities of Xin Jiang, Research Center for Local Dialects (the aforementioned two research centers make up the Research Organization on Minority Languages of Xin Jiang), the Research Center for Study of Soviet Problems, the Research Center on Xin Jiang History, the Research Center on Sino-Asian History, Research Center for Government Policy and Marxist Theory on Minorities, Research Center for Computer Technology, Research Center on Lasers, Research Center on Chinese and Asian Geography and Research Section for Particle Physics Theory. The research done in each center is conducted by the teachers of each related department.

Since 1978, some of the more successful research projects include the following texts written by the literature sections: "An Uygur Chinese Dictionary", "An Ha Se Ke Chinese Dictionary", "A Comparative Analysis of the Chinese and Uygur Languages", "Research on Fa La Bi, his Thoughts and his Philosophy", "Historical Passages from the Western Territories", "Revisions in Literature of the Uygur Nationality", "Selections of Literature of the Uygur and Wu Zi Bie Ke Nationalities", "An In-depth Study of the Written Language of the Chinese", etc. Among these, the "Uygur Chinese Dictionary" was the first to be printed in the country, and it has contributed greatly towards the unification of the nationalities of Xin Jiang and the establishment of the four modernizations for our country. There have been around 20 successful scientific research projects completed, and they have received awards from the National Science Committee or the science committees of the autonomous region for their excellence. Among them, there is Assistant Professor Li Zi Ping of the Physics Department, who wrote "Angular Momentum in Electronic and Electromagnetic Polarization", "U,(t,t) Algorithms for Order of Proximity", "Nonconductive Polar Leads in Higg's Dipolar Quark Confinement", etc. All of these essays have been published in the "American Physics Digest" and the "Guang Zhou Particle Physics Theory Discussion Committee Notes".

The school regularly publishes the Xin Jiang University School Paper which is published in the two languages of Chinese and Uygur.

The school library currently has a collection of over 720,000 publications and, among them, there are 70,000 foreign publications. In addition, there are 1350 types of periodicals, among which, there are 419 foreign periodicals. There are 11 types of minority periodicals available.

The school is affiliated with a part time school and the school manages a factory, an agricultural farm, a campus hospital and a child care center.

The school occupies an area of 725 mu and current campus constructed facilities occupy a surface area in excess of 97,400 square meters.

Xin Jiang University is located in Nan Liang of Urumuqi, and it is currently under the administrative control of the Xin Jiang Uygur Autonomous Region.

Current School Administrator: Zhang Dong Yue Party secretary: Zhang Yang



TAI WAN PROVINCE

(materials not available)

NOTES:

1. This book is based on material published in 1980. In 1980, aside from the institutions of higher learning introduced above, the State Council also approved the establishment of 15 new institutions of higher learning, and because they were in the planning stages, they were not introduced in this book.

These 15 institutions of higher learning area: Bei-jing Commodities Institute Chinese Institute of Music He Bei Institute of Chinese Medicine Mongolian Nationalities' Medical Institute Mongolian Nationalities" Teachers Institute Shanghai Railway Medical Institute Su Zhou Railway Teachers Institute He Fei Geology Institute Shang Dong Teachers Institute for Technological Industries He Nan Teachers Institute for Technological Industries Southern Chinese Nationalities Institute of Learning People's Vocational School for Navigation and Flight Da Li Medical Institute Xi An Railway Teachers Institute Ning Xia Industrial Institute

2. While compiling this book, Shan Xi Province's Coal Industries and Chemical College was abolished, and for that reason, it does not appear herein.

3. Each school's departments and specialties listed in this book were current as of 1980. Based on the directive to "reorganize, revise, rectify and elevate", there may have been some reorganization or new additions.

EDITORIAL STAFF FOR "A Synopsis of Institutions of Higher Learning in China"

Chief Editor, Xiang Shi
 Deputy Editors, Wang Xian Ming, Yu Na Huang, Jin Chuan, Lou Xiang

123

Person responsible for statistical materials, An Hua Person serving as school intermediary, Lou Xiang

Design layout, Zhang Ci Zhong

1

