

UNCLASSIFIED

408 839

ENSE DOCUMENTATION CENTER

FOR

IENTIFIC AND TECHNICAL INFORMATION

CAMERON STATION, ALEXANDRIA, VIRGINIA



UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

FOREWORD

This publication was prepared under contract for the Joint Publications Research Service as a translation or foreign-language research service to the various federal government departments.

The contents of this material in no way represent the policies, views or attitudes of the U. S. Government or of the parties to any distribution arrangement.

PROCUREMENT OF JPRS REPORTS

All JPRS reports may be ordered from the Office of Technical Services. Reports published prior to 1 February 1963 can be provided, for the most part, only in photocopy (xerox). Those published after 1 February 1963 will be provided in printed form.

Details on special subscription arrangements for JPRS social science reports will be provided upon request.

No cumulative subject index or catalog of all JPRS reports has been compiled.

All JPRS reports are listed in the Monthly Catalog of U. S. Government Publications, available on subscription at \$4.50 per year (\$6.00 foreign), including an annual index, from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

All JPRS scientific and technical reports are cataloged and subject-indexed in Technical Translations, published semimonthly by the Office of Technical Services, and also available on subscription (\$12.00 per year domestic, \$16.00 foreign) from the Superintendent of Documents. Semimonthly indexes to Technical Translations are available at additional cost.

JPRS: 19,358

ABSTRACTS FROM EAST EUROPEAN
SCIENTIFIC AND TECHNICAL JOURNALS

No. 182

- General Series -

This report consists of abstracts of articles from the East European scientific and technical journals listed in the table of contents below.

Table of Contents

Page

BULGARIA

Spisanie na Bulgarskata Akademiya na Naukite, Sofia, Vol 7,
No 4, 1962

1

BULGARIA

Unsigned.

"Decree of the Central Committee (Tsentralniya Komitet) of the Bulgarian Communist Party (BKP-Bulgarskata Komunistsheska Partiya) and of the Council of Ministers (Ministerskiya Suvet) on the Improvement of State Leadership in Science and Technical Progress and on the Expansion and Strengthening of Scientific-Research and Design-Construction Work."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 3-21.

Abstract: The decree describes Bulgarian science as lagging behind despite 31 scientific institutes under the Bulgarian Academy of Sciences, 24 under the Academy of Agricultural Sciences, 21 technical scientific research institutes in various fields of light and heavy industry, 22 higher educational institutions, and a total of 6000 scientific workers employed in scientific research institutes and higher educational institutions. (only 18

BULGARIA

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 3-21. (continued).

percent of which 6000 work in the field of the technical sciences). There was no single agency to plan, coordinate, finance, and control scientific research work in line with the evolution of the national economy. A new State Committee on Science and Technical Progress was therefore to be set up on the basis of the existing Committee on Technical Progress and State Council on Science under the Council of Ministers. New institutes and sections were also to be set up in the departments of the physical and mathematical, chemical, technical, and economic and legal sciences of the Bulgarian Academy of Sciences to deal with weaknesses therein. Scientific research institutes were to be organized or strengthened in the fields of machine building, metallurgy, hard coal, power engineering, geology, chemical industry, textile industry, lumber and furniture industry, food processing industry, construction, transport and communications, and domestic trade. No

2/2 references.

BULGARIA

Unsigned.

"Decree of the Central Committee (Tsentralniya Komitet) of the Bulgarian Communist Party (BKP-Bulgarskata Komunistichestka Partiya) and of the Council of Ministers (Ministerskiya Suvet) on the Training of Senior, Intermediate, and Executive Personnel for Various Branches of the National Economy and of Scientific and Scientific-Pedagogical Personnel for Higher Educational Institutions and Scientific Institutions.

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 21-34.

Abstract: There was a need to complete the reconstruction of the educational system in the forthcoming years despite the fact that there were 200,000 specialists with intermediate specialized education (80 percent trained since 1945) as well as nearly 100,000 with higher education. There were relatively few engineers and technicians in 1/2/transportation and industry (especially machine build-

BULGARIA

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 21-34. (continued).

ing, power engineering, and equipment design) and there were shortages of such personnel in certain decisive fields (mathematics, physics, chemistry, electronics, nuclear physics, etc.), while the Ministry of Education and Culture had been "slow" to apply "certain provisions" of the Law on Closer Links Between School and Life (1959), and large numbers of workers were poorly skilled and had low general and specialized educations. By 1970, there were to be 280 specialists with higher and "semi-higher" education (including 65 engineers) and 430 specialists with intermediate education (including 210 technicians) per 10,000 persons. Among measures planned to this end were the foundation of new higher and "semi-higher" educational institutions, new regulations on enrollment and scientific specialization in Bulgaria and abroad, expanded night schools and correspondence courses (to handle 50 percent of students in higher and intermediate professional educational institutions by 1980), long-range plans

BULGARIA

PAVLOV, Academician (Akademik) Todor.

"The Question of the Base, Man, and the Social Sciences."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 35-43.

Abstract: The author, in a speech delivered at the Eighth Congress of the Bulgarian Communist Party in his capacity as President (Predsedatel) of the Bulgarian Academy of Sciences (Akademiya na Naukite), stressed the need to build up a new communist man along with the construction of the material-technical base of communism. The author drew two conclusions, viz., firstly that "creative freedom" must be guaranteed to every individual member of a socialist and communist society and that a communist society is incompatible with any sort of cult of any personality, and secondly that the liquidation of any such cult does not mean the denial of the authority of natural leaders enjoying universal recognition (the prime example being N.S. KHRUSHCHEV). Finally, the author emphasized

172/

BULGARIA

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 35-43. (continued).

the continuing importance of the social sciences in national development, warning against "certain Bulgarian circles" that had retained a contemptuous attitude toward the social sciences and against those who would base development solely on the natural-mathematical and technical sciences. Specifically, the author suggested at least a slight reduction in the "colossal" construction under way for administrative buildings, hotels, and the like in favor of at least one large institution devoted to the social sciences and philosophy. No references.

12/2

BULGARIA

CHERNOSOV, Academician (Akademik) Vladimir K.

"The Influence of Soviet Higher Geodesy on Bulgarian Geodesy."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 44-49.

Abstract: The author briefly describes the work that went into two achievements of Soviet geodesy that have been applied and elaborated in Bulgarian science, viz., the Krasovski referential ellipsoid for representing points on the earth's surface in a lateral relationship and the Melodenski quasigeoid for representing points on the earth's surface in a vertical relationship. In his capacity as head (predsedatel) of the Central Geodesic Laboratory (Tsentralna Laboratoriya po Geodesiya), the author had published in 1959 a book of tables in connection with the Krasovski ellipsoid in conjunction with Antal TARZI-HORNOCH, head of the Geodesic Research Laboratory under 1/1 the Hungarian Academy of Sciences in Sopron. No refs.

.....

BULGARIA

ILIEV, Corresponding Member (Chlen-Korespondent) Lyubomir.

"The Life and Work of Academician (Akademik) Lyubomir CHAKALOV."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol. 7, No 4, 1962, pp 50-57.

Abstract: The author eulogizes mathematician Chakalov, Secretary (Sekretar) of the Department of Mathematical and Physical Sciences (Otdelenie za Matematicheski i Fizicheski Nauki) of the Bulgarian Academy of Sciences (Bulgarskata Akademiya na Naukite), on the occasion of the latter's retirement after 54 years of academic activity. Born in 1886, Chakalov earned a degree at the University of Sofia and was on the staff of the same institution from 1909 on. He also studied for two years at the University of Goettingen in Germany. He had authored nearly 100 scientific publications and had often represented Bulgarian science at international conferences. No references.

1/1

BULGARIA

BESHEVLIEV, Corresponding Member (Chlen-Korespondent)
Veselin.

"Dr Nikola Sava PIKOLLO."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol
7, No 4, 1962, pp 58-66.

Abstract: The author describes the life and work of
Pikolo, the first Bulgarian scientist of international
renown, on the occasion of the 150th anniversary of the
latter's birth in 1792. Educated at the Greek lycee in
Bucharest, Pikola later began to study medicine in Italy
at Bologna and completed his studies at Pisa in 1829. He
taught in Greece during the Greek wars of liberation in
the 1820's and lived in Bucharest between 1830 and 1839,
where he worked as a physician and was appointed inspector
of schools and hospitals during the Russian occupation.
He lived in Paris from 1839 until his death in 1865, work-
ing as a physician and publishing numerous works on the
Greek classics. No references.

BULGARIA

Unsigned.

"General Assembly of the Bulgarian Academy of Sciences."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol
7, No 4, 1962, pp 67-90.

Abstract: Academician (Akademik) Vladimir Georgiev nomi-
nated Academician Todor PAVLOV as Honorary President (Po-
cheten Predsedatel) of the academy (seconded by Acade-
mician Georgi UZUNOV), and Academician Lyubomir KRUSTANOV
as President (Predsedatel) of the academy, both men being
unanimously elected at a general assembly held 24 Novem-
ber 1962. Prof Krustanov, 55, received his doctorate in
the physical sciences at the University of Sofia in 1938
and has been Chairman (Rukovoditel) of the Department of
Meteorology and Geophysics (Katedra po Meteorologiya i
Geofizika) at the Faculty of Physics and Mathematics
(Fiziko-Matematicheski Fakultet) since 1960. Prof
Krustanov's basic research has been directed toward the
theory of condensation processes in the atmosphere.

BULGARIA

IVANOV, Academician (Akademik) D.

"International Colloquium on Organic Metallic Compounds in Paris."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 91-95.

Abstract: The colloquium, held 24-28 September 1962, was organized by Prof Henri Norman of the Sorbonne and was devoted to two basic courses of research, viz., structural problems and new reactions with compounds of the metals lithium, magnesium, zinc, cadmium, and aluminum. Fourteen scientists from outside France attended, and 32 scientific reports were read. No references.

1/1

BULGARIA

PIR'OV, Corresponding Member (Chlen-Korespondent) G.D.

"Psychological Science in Poland."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 94-101.

Abstract: The author attended the 11th congress of the Society of Polish Psychologists from 28 to 30 October 1962 and describes psychological studies and research in Poland. Training lasts five years at the three major universities in Warsaw (departments of general psychology, experimental psychology, and pedagogical psychology), Poznan (departments of general psychology and clinical psychology), and Cracow (single department). There are also psychology departments in universities and pedagogical institutes in Gdansk, Katowice, Wroclaw, and elsewhere. Research is also performed in the Institute of Specialized Pedagogics, the Psychometric Laboratory and the Children's Psychiatric Clinic under the Polish Academy of Sciences, 1/1 and Institute of Industrial Economics and Organisation.

BULGARIA

GORNENSE, Nikifor, Candidate (Kandidat) in Historical Sciences.

"The Warsaw International Conference on the History of the Resistance Movement."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 102-117.

Abstract: The conference, the sixth such in five years, was held in April 1962 with 120 historians and representatives of organizations of resistance participants from 19 European countries in attendance. The major of 27 written reports presented was by Prof Stanislaw ARNOLD, Chairman of the Committee on the Historical Sciences of the Polish Academy of Sciences [original-language version not given], and was divided into three parts, viz., the periodization of the resistance movement in World War II, the civil and and military forms of resistance, and the international features of the resistance movement. A declaration in favor of peaceful coexistence and against "re-

BULGARIA

BULGARIA

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 102-117 (continued).

born German militarism" was adopted unanimously by those participants exercising their right to vote. Two French followers of De Gaulle, two Italian Christian Democrats, and the three-man delegation from Albania abstained from the voting on the declaration. The next conference is to be held in September 1963 in Prague. Numerous references in footnotes.

BULGARIA

TOMOV, Toma St. [affiliation not given].

"First International Congress of Hispanic Studies."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 118-121.

Abstract: The congress was held at Oxford in England from 6 to 11 September 1962 under the auspices of the Society of Hispanic Scholars of England and Ireland for purposes of founding the International Society of Hispanic Scholars, to be a part of the International Federation of Modern Languages and Literatures of UNESCO. The congress was attended by 300 delegates from 25 countries, the author being the Bulgarian representative. No references.

[1/1]

BULGARIA

ANGELOV, B.St. [affiliation not given].

"All-Union Congress on Old Russian Literature in Leningrad."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 121-124.

Abstract: The fifth such Soviet congress was held from 22 to 28 May 1962. The basic problems discussed were the succession from the literature of Kievan Rus' to the literatures of the Eastern Slavs, the problem of the typological kinship and reciprocal influences of Slavic literatures, the problem of ancient Russian poetics, and the problem of reformation movements in Russia. N.K. GUDZIY [affiliation not given] discussed the influence of the Kievan chronicle tradition on the Galician-Volhynian Chronicle, the Codex Suprasliensis, and other materials. No references.

[1/1]

BULGARIA

BONEV, N., Corresponding Member (Chlen-Korespondent).

"Thirteenth Congress of the International Astronautical Federation."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 125-127.

Abstract: The congress took place in Varna 23-29 September 1962 and was attended by delegates from countries of both East and West. Aside from reports on the usual run of topics, there were interesting reports in the fields of cosmic law and cosmic medicine. The next congress will be held in Paris in September 1963. No references.

1/1

BULGARIA

NIKOLOVA, Svetlina [affiliation not given].

"Scholarly Session on Paisiy of Khilendar."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 127-133.

Abstract: The session lasted three days in December 1962 and was occasioned by the 200th anniversary of the writing of Istoriya Slavenobolgarskaya (Slavo-Bulgarian History), the beginning of the modern Bulgarian literary language, by the monk Paisiy of the Serbian monastery Khilendar on Mount Athos. The nature of Paisiy's epoch was argued variously by scholars, some describing the Bulgarian 18th century as the beginning of the development of a bourgeoisie, others pointing out that the disruption of Ottoman feudal relations had only begun and that Paisiy's work did not become widely known until 60 to 70 years after the writing of it. No references.

1/1

BULGARIA

BONCHEV, Ek., B. KAMENOV, and Iv. KOSTOV /affiliations not given/.

"International Conferences of the Carpatho-Balkan Geological Association."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 133-137.

Abstract: Conferences of the Commission on Mineralogy and Geochemistry, the Commission on Hydrogeology, and the Presidents of the Geological Societies of the Socialist Countries were held in Sofia 17-25 October 1962. The first conference dealt with two basic questions, the preparation of a mineralogical gazeteer and the publication of a geochemical gazeteer of the Carpatho-Balkan mountain system. The second conference suggested the preparation of hydrogeological and engineer-geological maps of the Carpatho-Balkan mountain system on a scale of 1:1,000,000. The third conference dealt with organizational questions. 1/1 of exchanges of experience and information. No refs.

.....

BULGARIA

PAVLESCU, Engr Dan, Department Head in the Academy of the Rumanian People's Republic /original-language version not given/.

"The Scientific Research Activity of the Academy of the Rumanian People's Republic."

Sofia, Spisanie na Bulgarskata Akademiya na Naukite, Vol 7, No 4, 1962, pp 138-139.

Abstract: The academy was reformed in 1948 on the basis of the old Rumanian Academy and now has 35 research institutes and centers in Bucharest and in branches in Jassy and Cluj, as well as scientific research bases in Temisvar and Turgu Mures. The work of the academy is divided into nine departments encompassing various branches of science and scholarship. Special commissions have also been set up to deal with special branches of science. A six-year research plan (1960-1965) is the basis for yearly plans. Exchanges are maintained with 4500 institutions in 93 1/1 countries. No references.

2463

- E N D -

CSO: 2000-N