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**PROFESSOR GOMBAS DISCUSSES THE PROSPECTS
OF PHYSICS IN HUNGARY**

by Istvan Gyorgy

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FOREWORD

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Professor Gombas Discusses the Prospects
of Physics in Hungary

/Following is the translation of an article
by Istvan Gyorgy in Nepszabadsag, Vol XVIII,
No 294, Budapest, 1960, page 11./

The name of Pal Gombas, academician, Dean of the Physics Department of the University of Technology, project leader of the Theoretical Physics Research Group, is known everywhere in the scientific world -- mostly on account of his studies in the theory of atomic physics. There is a physicists' Bible which is a comprehensive collection of the most up-to-date results of scientific endeavor. This is the Handbuch der Physik. The individual chapters are written by the foremost authorities in the various fields. The author of the chapter on the theory of atomic statistics is Pal Gombas. His scientific activities are defined by him in these words:

"As a theoretical physicist I endeavor to obtain a detailed picture of the structure and properties of matter."

On Education

Does today's youth feel the difference between the past and the present? -- we ask.

"Not everybody", answers the professor. How nice it would be if all of today's youths felt grateful for student homes, colleges, and for the tremendously improved support and appreciation of science by the state. But some youths take it all for granted. I must emphasize that only a small part of the youth feels that way. But these are the ones who go to exams unprepared and do not participate intensively in campus life. Many of them change their outlook after one or two years in college. But there is still a great waste of time -- theirs and ours. This waste of time could be eliminated

if we looked for the love of profession in the youth when we accept them for school. We should do this "probing" together with the exams which check their material knowledge. This dedication is the basis of everything! The filling of the mind is our work but we can not get anywhere without willingness for study on the part of the student.

"The training for disciplined life and work should be better in the high schools. I watch some high school students as they cock their hats when they meet their teachers. This is their "greeting"! Why do the teachers tolerate that? Why do they tolerate rudeness and disrespect for the elders? I don't know where this great "self-confidence" comes from in some of our youth. It should be stifled. I am convinced that in any single high school class there is only a relatively very small group which is harmful. But these persons blight the rest and their effect lasts even here at the university for a year or two. We should not allow one single playboy in the schools, trying to contaminate the good students!"

Where Less Would Be Better

Pal Gombas passionately hates everything which slows progress and scientific work and obstructs the education of our youth. He suggests that since the state puts a great deal of money into science, scientific workers should be relieved of some of their present administrative duties. The money invested in science would return much faster if part of the scientists' time were not taken up by our incredibly oversized administrative apparatus. The number of meetings should be also reduced. We organize too many congresses and symposia.

The Future

"The progress of our scientific life is healthy. Scientific work reaches its goal: it helps the economy of the country. Our scientists are working right now on the plans of future developments. We could reach our goals sooner if we work in those fields which are important for our economy and our society. After all, we are living in a small country; our financial resources are limited and we have less scientists than the bigger states. We must not overly divide our strength. Since we have to serve everyday life, we have to think twice before

starting on a new theme. Science should look further than the direct goals of industry, however. In the field of theoretical physics, for instance, we have to move in a wider region than we would in experimental or technical physics.

"Our Theoretical Physics Research Group has to assist, primarily, the research work carried out in our technical and scientific research institutes. The theoretical and experimental parts of physics are interdependent. The cornerstone of future progress is the assistance the two branches of physics can give to the economy. Theoretical physics has always gotten and will in the future get all the support necessary for development.

"Our contacts with other countries have to be further strengthened. We have been on good terms with the scientists from both East and West. But every contact can be bettered. Our contacts with the Soviet physicists -- Fok, Ivanenko, Sokolov and others -- have been very good. In the future we could build even more on each other's research although this is not simple in theoretical physics. We would like to have an even more intensive, personal, friendly relation and even better work distribution with the friendly countries."