

LIFE OF SCIENCE

A MONTHLY DEVOTED TO THE SCIENCE OF SCIENCE

Editor: MIECZYSŁAW CHOYNOWSKI

VOL. 1

APRIL 1946

NO. 4

ONE PERCENT FOR CULTURE!

By DEZYDERY SZYMKIEWICZ

THE CREATION of culture requires financial means which must be secured by a permanent position in the budget, and which should not depend on the fluctuating conditions of the market. One percent of the ordinary State budget should be devoted for conducting scientific researches and for promoting creative work in the field of Art. This fund should not be subject to cuttings, even if reductions in the budget occur; the good and the continuity of creative work in the domain of culture demand it.

THE RESEARCH INSTITUTE OF FORESTRY, CRACOW

TEAM-WORK IN SCIENCE

By ANATOL LISTOWSKI

THE WORLD is faced to-day not only by problems of rebuilding but also by problems of reconstruction on new lines. To solve these problems will be, to a great extent, the role of the science, which is instrumental in acquiring the knowledge of, and the domination over, the world. The development of science necessitates a planned effort and a collective activity, thereby making team-work particularly important. The freedom of science is one of the most important results of the humanistic outlook upon the world. But the freedom of science consists in the independence of its results from criteria lying outside the domain of science, it has, however, nothing to do with the methods and the technique of research work. Our duties towards life force upon us thematic considerations of scientific works, and the wide range of these themes leads us to the collectivity of research and to a collaboration of the men of science.

The organization and the planning of researches should be in the hands of scientists. When organizing and planning, we should not forget that both methods of scientific work — the individual method and the collective one — have their advantages. Some problems should rather be solved collectively, others will remain the aim for individual effort.

INSTITUTE FOR PLANT-BREEDING, JAGIELLONIAN UNIVERSITY, CRACOW

TEAM-WORK AND RESEARCH INSTITUTES IN THE HUMANITIES

By JAN RUTKOWSKI

ONE of the most important tendencies in the development of the organization of scientific researches in the course of the last 200 years is the steadily growing significance of team-work. An example of a loose form of team-work are the scientific periodicals. Encyclopaedias and collective publications are more strict forms of collective endeavours. The most complex form is represented by a body of collaborators helping to create an uniform whole, the individual research-workers conducting researches dealing with parts of the problem in question under the guidance of one person.

In the case of humanities the idea of organized work in conducting scientific researches is realized by means of research institutes, which are far less common or developed than research institutes having to do with the natural sciences. Every scientific institution, equipped with an organized body of workers undertaking collective works, may be regarded as a research institute. The oldest types of humanistic research institutes are the institutes for statistics. An analogous organization of institutes is used in economics, sociology and history. The creation of such institutes is very advisable, particularly to-day, when the capitalist structure is in the process of being changed into a socialist one.

On account of financial difficulties, the humanistic institutes should be organized in close connection with the universities. Such institutes should be interdepartmental, i. e. they should link together all related chairs of all the faculties. This will bring about a considerable economy as regards the premises and the staff, enabling them to use one common library and research-room. Such institutes, besides their didactic activities, could continue research work which might rise to a much higher level thanks to a good organization of team-work than under different conditions.

SEMINAR OF ECONOMIC HISTORY, UNIVERSITY OF POZNAN

THE AMELIORATION OF THE CONDITIONS OF SCIENTIFIC WORK IN THE UNIVERSITIES

By KAZIMIERZ SEMBRAT

THE EFFICIENCY of scientific research work depends on suitable scientific equipment and on personal factors on the one hand, while on the other hand it depends upon the afflux of young scientific workers.

An amelioration of the conditions of scientific work in the universities could be brought about by creating institutes, uniting related chairs and departments. The result of such an organization would be to relieve the professors of the purely administrative matters, which could be given in the charge of a special clerk controlled by the head of the institute, chosen among the professors. All members of the institute could use the common library,

the room for photography, scientific equipment, etc. The different domains of science would necessitate a different organization, but in spite of these differences, the realization of such institutes would offer to their members much better opportunities for research work than those available now.

The university institutes should also be concerned with didactic activities, not with scientific research only. It would therefore be of great advantage to science to create centres connected with the institutes, but devoted to researches exclusively, as e. g. centres of scientific research placed far away from universities and having to conduct some special kind of work.

When speaking about the personal conditions, it would be advisable to follow the English example by creating two categories of professors: research professors and assistant professors. Technical assistants could also be of great help to the scientific workers. And lastly, the living conditions of the assistant workers should be improved and their further scientific career ensured.

THE ZOOLOGICAL INSTITUTE, UNIVERSITY OF WROCŁAW

ATOMIC ENERGY AND THE FUTURE OF THE WORLD

by MIECZYSŁAW CHOYNOWSKI

IN connection with the fact that atomic energy has been mastered, men of science feel more and more conscious of their responsibility for the welfare of mankind and the future of civilization, and we hear them very often taking part in a discussion of these problems. Very significant, among others, is Arthur H. Compton's speech dealing with *Atomic Energy as a Human Asset* (see *Nature*, 1946, No. 3980), in which the great American physicist demands the creation of a World Government, and also discusses the use of atomic energy for peaceful purposes and points to the necessity of greater co-operation, more training and education, and of evaluating one's life in terms of service rendered to the community.

This speech is characteristic both for the social attitude of the scientists, and for the cause of atomic energy. The scientists cannot refuse to take part in solving problems of collective life, and they should regard it as their aim to make the applications of psychology, sociology and economics, which are so vital when it comes to a rebuilding of the world on new lines, supplement the applications of physical and biological sciences as closely as possible. The results of the technical applications of atomic energy should be foreseen, if its liberation is not to bring extermination to mankind. All technical discoveries lead towards economic changes, which again are responsible for cultural and social changes. This applies to atomic energy too. It is not possible to see details clearly as yet, but together with Compton we must state the necessity of a World Government, which would prevent wars, and the necessity to educate man better than it was done up to now.

CIRCLE FOR THE SCIENCE OF SCIENCE, CRACOW

THE ROLE OF GEOLOGY IN THE ECONOMIC LIFE OF THE COUNTRY

By HENRYK ŚWIDZIŃSKI

POLISH geology stands to-day before the gigantic task of ascertaining the resources of our raw materials, which are so necessary for the reconstruction of our country. But the public in general knows very little about this science. Geology tells us about the crust of the earth, and it is divided into theoretical geology and practical or applied geology. The discoveries of the latter are often of tremendous importance to mankind. The State should consider it a necessity to offer geology in Poland the greatest protection possible.

STATE INSTITUTE OF GEOLOGY, CRACOW

SOME REMARKS CONCERNING THE PUBLICATION OF SCIENTIFIC WORKS IN POLAND

By JAN MERGENTHALER

THE PROBLEM of equipping scientific institutions and research laboratories with publications requires an efficient and inexpensive organization. It would be best solved by an international system of exchange of the publications. It is therefore advisable to avoid an excessive number of periodicals which have the bad side of involving costs of subscription, and instead, to see to it that every scientific institution publishes its own publications (they may be reprints) and sends them free of charge to all institutions working in the same field. Every institution would conduct this exchange on its own account, because a central exchange bureau might handle these matters with less efficiency. In this way each institution could get in return for its own publications all published matter from the whole world dealing with subjects related to its special interests. Such an organization should embrace all domains of science and all the countries. Of course, all published works should be printed in the congress languages, with summaries in less known languages.

INSTITUTE OF ASTRONOMY, THE MARIE CURIE-SKŁODOWSKA UNIVERSITY, LUBLIN

THE WORLD OF SCIENCE AND THE REHABILITATION OF ETHICAL CULTURE

By EDMUND JAN REYMAN

AMONG the calamities and disasters, caused by the last war, the breaches in the character and the lapses from moral integrity of the entire humanity form an important position in the balance of losses. As Poland had been the territory, where surely the most cruel crimes were committed, which tended not only to decimate the nation, but also to deprave it morally, our country could not escape the general demoralization. During the whole time of the occupation by Hitler's bandits, all noble traits had been completely disregarded and ill-treated, while baseness and vileness were rife.

We constantly and very justly point to the general demoralization, but it is not enough to point to it, this evil must be suppressed with the help of all existing and available preventive measures. Particularly to-day, when we are building the framework of our reconstructed state, which will be rebuilt upon new and more just foundations, we must not forget to reconstruct the most valuable factors — namely the character and the moral sense of the nation.

I am therefore of the opinion that an *Institute for Propagating Ethical Culture* should be called into being, which would delineate methods of struggling against the spreading of demoralization, and which would propagate ethical culture in our society with the help of lectures, publications, films and the wireless. The main task of this proposed institute would be to raise the moral worth of man to a higher level, and indirectly, to enhance the value of life by endowing it with the joy and charms which it now possesses for very few individuals only.

The representatives of the world of science are above all called upon to undertake this task, because they clearly understand the importance and the significance of a high moral level for the good of the society and of the state. They also grasp the necessity to democratize not only science and knowledge but also culture in general, and particularly ethical culture. As educators of younger generations they are predestined to play the sublime part of constructors of a better and happier future by the rehabilitation of the idea of *humanity* which has been so ill-treated during the war.

I am sure that my voice will not remain unanswered, and I hope that it will give rise to a discussion to the point. I wish to express the hope that it may mean the beginning of an action, embracing the whole world and tending towards universal peace by the regeneration of man and by the collaboration of all nations.

THE ACADEMY OF POLITICAL SCIENCES, WARSAW

THE REST of this issue includes a chronicle of scientific life in Poland, a discussion of the activity and the congress of the Copernicus Society of Polish Natural Scientists, being one of the most important Polish scientific organizations, an account of the scientific congress, devoted to the problems of the pleistocene, and of the meeting of the Scientific Council. Then there is a review of laws concerning science, a review of the Press and numerous items from foreign chronicles, among which *Polemic 2* has been discussed, and many informations as to the events in the scientific world abroad have been given. These informations are almost entirely based upon *Nature*, which is up to now the chief and invaluable source of information to the Editor.

The annual foreign subscription rate is 4.00 Dollars.

Subscriptions and all other communications should be addressed to
THE EDITOR, „ŻYCIE NAUKI”, KRAKÓW, SZOPENA 1, POLAND.