

NON-OFFICIAL SCIENTIFIC INSTITUTIONS.

(INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE.)

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Utilisation of the resources available in non-official scientific institutions (e.g. Indian Association for the Cultivation of Science, Bose Research Institute, etc.), as also their expansion, are important points for consideration in the post-war organisation of scientific research in India.

These institutions are not attached to any University or to any scientific Department of the Government. As such they have a certain degree of freedom to plan and carry out their own line of work. The oldest institution of this type in the country is the Indian Association for the Cultivation of Science, founded in 1876 through the efforts of the late Dr. Mahendralal Sircar. It was established at a time when facilities for scientific research and also of science teaching were extremely poor—practically non-existent—in the country. The Association was therefore founded with the two-fold object of fostering original research in science and of imparting instructions in science. The founder aimed at establishing a central institution in Calcutta with branches in different parts of the country. The Association actually organised instructional courses in Physics, Chemistry and Botany. In course of the six decades that have passed since the foundation of the Association, facilities for science teaching and of scientific research have grown up in our Universities. There is now perhaps little need for the Association to arrange for instructions in undergraduate courses. But its need—to quote the words of Dr. Sircar—“for cultivation of Science in all its departments, with a view to its advancement by original research and with a view to its varied application to the arts and comforts of life”, remains as imperative as it was in the days of its inauguration.

The functions of non-official institutions like the Indian Association for the Cultivation of Science are similar to those of the famous institution in Germany, the Kaiser Wilhelm Institute. It is amazing to find that Dr. Mahendralal Sircar, with his clear vision, foresaw in 1876 what Germany discovered a quarter of a century later, namely that the economic salvation of the country lay in the study and in the wider and still wider application of science to nation-building work. But unfortunately, while the Kaiser Wilhelm Institute has progressed by gigantic strides since its inauguration in 1902, with help from the State and the industries, our Association has hardly extended its scope of activities; though, of course, we can claim to have made, with the meagre resources at our disposal, substantial contribution to the advancement of human knowledge. The work of the Indian Association for the Cultivation of Science is to supplement those done by the Universities rather than to compete with them. It attempts at providing facilities for research to gifted workers, whose time would otherwise be wasted if employed in routine teaching or in administrative work. It also provides for Research-Fellowship to young and promising students who have taken their doctorates from the Universities, but have not been able to find a situation where they can carry on further research work in their own lines. A very important function of the Association is, in fact, to train young men of outstanding abilities for higher research work, and thus to contribute to the development of the educational and scientific life of the country.

According to the objects of the founder, the Association should have carried out two types of investigations, one, pure research in subjects like Chemistry, Physics, Botany, etc. and the other, application of the results of theoretical science to improve the economic standard of the country. Unfortunately, till now the Association has provided facilities for work in the first category only, and that also only in Physics. Little work has been done on the applied side and, for want of funds, there has practically been no facilities, for developing researches in Chemistry or in biological sciences.

In any scheme for post-war organisation of scientific research provision must be made for fuller utilisation of the resources of non-official organisations like the Indian Association for the Cultivation of Science, and funds must be made available for their expansion. These institutions, while retaining their autonomous character, will be able to undertake investigations on problems which might be referred to them by the proposed National Research Council and will also train scientific workers of which there is bound to be a great demand in any post-war reconstruction plan which the State might inaugurate.