

Basic Science in Universities

The creditable state of science in Canada today is the result of steady growth over the past 50 years. In 1916, very little scientific research was done in Canadian universities. Only the universities of Toronto and McGill were granting Ph.D. degrees in science and, during the 11 years before the First World War, only three such doctorate degrees were granted.

Looking to the universities for competent scientists, NRC, began in 1917, a programme under which research grants were offered to professors and scholarships were offered to graduate students interested in research. This programme has kept pace with the capacity of the graduate schools in Canada and the demands of government and industry for researchers. Thus, by way of contrast, in 1965-66 more than 8,500 students were enrolled for post-graduate degrees in science and engineering (including medicine, dentistry and psychology) in some 24 Canadian universities. About 3,500 of these expected to obtain their master's or doctorate degrees in 1965. This growth, of course, reflects a general development in Canada. Nevertheless, the NRC programme played a significant role in facilitating this expansion and in developing a system of financial aid to basic research in universities, without interfering with academic freedom.

In 1965-66, NRC administered over 1,200 scholarships for students in post-graduate science, as well as many grants to professors. The grants not only furthered basic investigation but also provided means for hundreds of additional students to continue their post-graduate training. The Council's programme of aid to basic science is to cost nearly \$22 million in 1966, compared to \$3.6 million in 1957. Included in the programme are grants to individuals in Canadian and international scientific organizations, aid to international congresses held in Canada, and publication of a number of scientific journals.

Scientific Societies and International Affiliations

The Council makes annual grants to such organizations as the Royal Society of Canada and the Canadian Standards Association. It gives financial support to scientific conferences and aids in international exchange of scientists, for example such programmes as the NRC-Nuffield Foundation Visiting Lectures and the exchange between the Soviet Academy of Sciences and NRC. The Council also participates in a space-research programme in collaboration with a number of departments of the Canadian Government and other groups at the universities; and it facilitates Canada's share in the international space programme of COSPAR. It holds membership as the representing body for Canada in various international scientific organizations.

Research Journals

The Research Council also edits and publishes the Canadian Journals of Research, eight periodicals that report basic research in biochemistry, botany, chemistry, earth sciences, microbiology,