

Defence Research Board

Various laboratories in Canada that NRC had staffed for defence work achieved separate identity in 1947 under the newly-formed Defence Research Board of Canada. With a budget comparable to that of NRC, the Board conducts investigations in materials, armament, special weapons, telecommunications, aeronautics, Arctic problems and operational techniques. Its programme of upper-atmosphere research is carried on in co-operation with NRC and other research groups in government and universities. The Board also makes grants to universities for medical studies related to problems of defence.

Medical Research Council

Aid to basic medical research in universities also developed within NRC to a yearly volume in 1960 of over \$2 million; and, in that year, the Medical Research Council of Canada was formed as an autonomous body to take over the medical grants and fellowships and otherwise to pursue its own objectives.

Basic Science in Universities

The creditable state of science in Canada today is the result of steady growth over the past 40 years. In 1916, virtually no 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 very early began 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 1961-62 more than 3600 students were enrolled for postgraduate degrees in science and engineering (excluding medicine, dentistry and psychology) in some 30 Canadian universities. About 2000 of these expected to obtain their master's or doctorate degrees in 1962. This growth of course reflects a general development in Canada and was not accomplished solely through the NRC programme. Nevertheless the NRC programme played a most significant role in facilitating the expansion and in developing a system of financial aid to basic research in universities without interfering with academic freedom.

In 1961-62, NRC administered nearly 1100 scholarships for students in postgraduate science and 1480 grants to professors. The grants not only furthered basic investigations but also provided the means for hundreds of additional students to continue their postgraduate training. The Council's programme of aid to basic science is to cost nearly \$15 million in 1962, compared to \$3.6 million in 1957. Included in the programme are grants to 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 in such programmes as the NRC-Nuffield Foundation Visiting Lectures and the recently-inaugurated 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.