

NATIONAL RESEARCH COUNCIL

In the past year, the National Research Council:

provided \$5.9 million to support pure research in the universities (including 681 grants; 435 scholarships, fellowships and associateships); employed 613 scientific research staff (including 149 postdoctorate fellows), 883 technical personnel, and 887 general service and administrative staff; operated five laboratory divisions in the sciences: Applied Biology, Applied Chemistry, Pure Chemistry, Applied Physics, and Pure Physics; operated four engineering Divisions: Building Research, Mechanical Engineering, the National Aeronautical Establishment, and Radio and Electrical Engineering; operated two regional laboratories, one at Halifax and the other in Saskatoon; and operated a Division of Medical Research to award grants and fellowships in support of research in this field; sponsored 32 Associate Committees, operating in such diverse fields of science as Aquatic Biology, Corrosion Research, Plant Breeding, Radio Science, and Soil and Snow Mechanics; answered 9,000 technical enquiries from Canadian industries.

This information is in the forty-second annual report of the National Research Council of Canada, 1958-1959. Excerpts from the report of the President, Dr. E.W.R. Steacie, follow:

"As science has become necessary to government, two quite distinct types of organization have been developed. First, there are government departments that need experimental facilities in order to do their job. On the other hand many countries have set up a quite different type of body, in Canada represented by the National Research Council, whose duties are rather like those of a national academy; these duties include support and encouragement of research in pure and applied science, together with a residual responsibility for scientific research in all fields, and especially in those not covered by the more narrowly defined objectives of government departments. Such bodies need, and in general have been given much more freedom than a government department. They are very complex organizations, intimately connected simultaneously with government, with industry and with universities.

"The National Research Council was set up by Order in Council in 1916 (Act of Parliament, 1917) and is a corporate body, not a Department of Government. It has no Minister in the usual sense, but reports to the Committee of the Privy Council on Scientific and Industrial Research, which is composed of nine Ministers whose departments have to do with research or scientific affairs. The Chairman of the

Committee has for a considerable time been the Minister of Trade and Commerce. It should be emphasized, however, that the Council has no specific connection with the Department of Trade and Commerce as such. It is, in fact, one of the first examples of a Crown Corporation.

"The Act gives the Council a number of powers which are not possessed by Government departments: in particular, the Council is outside the Civil Service, has a governing body of independent, non-government scientists, can earn revenue and spend it, etc. All these powers have been used with discretion, but they are absolutely essential for the operation of a first-rate scientific organization with broad responsibilities. Above all, it is vital that the very high reputation of the scientific staff be maintained. The status of the staff is due entirely to the control and selection being in the hands of the Advisory Council, a group of the most distinguished non-government scientists in Canada.

"Canada is in fact one of the few countries which has recognized the fundamental fact that the control of a scientific organization must be in the hands of scientists. It is a major accomplishment of the Canadian Government that many of our scientific agencies are controlled by people familiar with their needs. Certainly the Research Council is envied by many foreign laboratories on this account, and Canada has had a great deal of influence on the organization of many foreign government scientific bodies.

RESEARCH IN UNIVERSITIES

"In 1916, the original members of the Council realized that before they could foster or co-ordinate scientific research in Canada there must be active groups of scientists in universities and a supply of trained research workers coming from university graduate schools. They therefore decided that their first duty was to encourage science students to continue their post-graduate work in Canadian graduate schools. To promote the development of university science the Council provided grants to members of university staffs for equipment and supplies, and scholarships to post-graduate research students.

"The programme has undergone steady, and in recent years spectacular expansion. It started with the modest expenditure of \$14,000 in 1917-18. Since then a total of \$34,000,000 has been provided by the Council to aid university research. Some idea of the rapid expansion in recent years can be seen from the fact that approximately half of the total of \$34,000,000, has been spent in the last four years, that \$6,000,000 is being spent in the current year and that a further \$8,200,000 will be spent next year. Continued expansion, and rapid expansion, is certainly necessary, but the programme is already of very considerable