

search, mechanical engineering, radio and electrical engineering, and the National Aeronautical Establishment. The two regional laboratories carry out research related to the resources of the Prairie and Atlantic regions. A Medical Research Council, responsible for the support of medical research but functioning under the general administration of the National Research Council, was established in November 1960 (see p. 302).

The National Research Council consists of the President, two Vice-Presidents (Scientific), one Vice-President (Administration) and 17 other members, each of the latter group being appointed for a term of three years and chosen to represent industry, labour, and research in science and engineering. Many of the members are drawn from Canadian universities. The Council reports to the Committee of the Privy Council on Scientific and Industrial Research through a Minister designated by the Governor in Council for the purposes of the National Research Council Act.

The Council's 1966-67 budget, excluding the provision for the activities of the Medical Research Council, is about \$89,000,000, approximately \$34,000,000 of which is required for foundation work—scholarships and research grants in science and engineering. The remainder is used to operate the laboratories and to provide for the Council's industrial research assistance program. Of the Council's 2,919 employees, 838 are scientists and engineers.

Links with Industry.—The application of science to Canadian industry has always been one of the major concerns of the National Research Council. Since 1917, representatives of industry, government and the universities have co-operated, through NRC Associate Committees, in solving pressing industrial and economic problems. There is a constant flow of personnel and information between NRC laboratories and those of industry, and roughly 70 p.c. of the Council's own effort involves applied research intended for industrial use. Contract research on specific projects and a wide variety of testing and standardization work are undertaken. Inventions from NRC laboratories are carried through the patent stage, then made available for manufacture through Canadian Patents and Development Limited (see p. 144).

A most important activity of the Council is its Technical Information Service, which consists of field engineers who visit manufacturing establishments, and a staff of trained researchers in Ottawa who use the technical literature available through the Council's Library. Although all inquiries are handled, the Service is particularly interested in helping small firms with no research or information facilities. Free advice is given on all aspects of materials and processing, equipment, plant design and packaging and on such topics as wage incentives and inventory control.

Direct financial assistance for research performed by Canadian industry was begun by the Council during 1962. Under this arrangement the Council makes grants supporting long-term applied research and development work proposed and carried out by industry. Aid is given on a shared-cost basis, with industry supplying at least half the funds for any one project. Companies of all sizes, representing a wide range of industrial activity, are eligible for assistance and the companies retain all rights arising from the work. In 1966-67, at a cost of \$5,300,000, the Council supported 31 new research projects and 118 continuing projects in 91 Canadian firms. This work gave rise, also, to over 700 new research positions.

Biosciences.—The program of the Division of Biosciences covers practical problems related to the national economy and fundamental studies that may contribute useful information in such areas as agriculture, medicine and certain industries. Apparatus and techniques for preparing, preserving and storing food make up a large part of the applied work and particular attention has been given recently to food freezing, cold storage in jacketed rooms and refrigerated transport. Study and testing have continued on a process now widely used in industry for the immersion freezing of poultry, quality loss in poultry meat during freezing and refrigerated storage, and an improved cooling system for frozen food trucks. The physical and chemical reactions influencing coagulation in