

Under the terms of the Research Council Act, the National Research Council has charge of all matters affecting scientific and industrial research in Canada that may be assigned to it by the Committee of the Privy Council on Scientific and Industrial Research. In discharging these responsibilities, the Council may undertake, assist or promote research. Its duties include the utilization of Canada's natural resources; the improvement of industrial processes and methods; the discovery of processes and methods likely to expand existing industries or to develop new ones; the utilization of industrial wastes; investigation and determination of physical standards, methods of measurement, and fundamental properties of matter; the standardization and certification of scientific and technical apparatus used by government and industry; the determination of standards of quality for materials used in public works and government supplies; investigation and standardization, at the request of industry, of industrial materials or products; and research intended to improve conditions in agriculture. The Council also has the duty of advising the Privy Council Committee on questions of scientific and technological methods affecting the expansion of Canadian industries or the utilization of the country's natural resources.

The Council's laboratories are organized in nine divisions and two regional laboratories, each with its own director. Five divisions are engaged in applied and fundamental studies in the natural sciences—applied biology, applied and pure chemistry, and applied and pure physics. Four others are devoted chiefly to engineering work—building research, 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.

During World War II, the Council was responsible for all research carried out for Canada's three Armed Services. After the War, most of the military work was transferred to the Defence Research Board (see Chapter XXV). Another wartime development, the Atomic Energy Project, was constituted as a separate Crown company, Atomic Energy of Canada Limited, in 1952 (see pp. 368-373).

A Medical Research Council, fully responsible for the support of medical research but functioning under the general administration of the National Research Council, was established in November 1960 (see pp. 268-270).

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 Parliament through the Committee of the Privy Council on Scientific and Industrial Research.

The Council's current operating budget is about \$46,000,000. Approximately \$17,000,000 is required for foundation work—scholarships and research grants in science and engineering, plus the activities of the Medical Research Council—and the remainder is used to operate the laboratories and to provide for the Council's Industrial Research Assistance Program. Of the Council's 2,600 employees, some 730 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 90 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 pp. 118-119).