

by the Province of Alberta in 1955. The laboratories work in co-operation with the scientific departments of the University and the operations of the organization are controlled by a council of ten individuals representative of government, the University and industry. The various research projects are under the immediate supervision of advisory committees and the chairmen of these committees form the Technical Advisory Committee of the Council, the body responsible for the integration and operation of the scientific aspects of the program.

British Columbia Research Council.—The British Columbia Research Council, under the sponsorship of the B.C. Department of Trade and Industry, provides a scientific and engineering staff with laboratories at Vancouver to help British Columbia industries solve their technical problems. Its objective is to enable even the smallest firms to make use of modern technical knowledge and research to improve their competitive position in Canadian and world markets. The Council provides three classes of service: (1) a free information service in collaboration with the National Research Council; (2) assistance to specific firms at cost where information cannot be supplied from existing knowledge; and (3) at the Council's expense, research on problems of general value to the industrial development of the Province.

The Ontario Research Foundation.—The Ontario Research Foundation was established in 1928, and is financed by an endowment fund composed of subscriptions from manufacturers, corporations, private individuals, and a grant from the Provincial Government on a dollar-for-dollar basis with the other contributions. The Foundation carries on research to assist agriculture and industry in developing the natural resources of the Province. A study has been made of the physiography and climate of southern Ontario and also of the parasites found in wildlife in this Province. Many investigations have been undertaken in the industrial field and the Foundation is well equipped to work in metallurgy, textiles, chemistry and biochemistry. The services of the Foundation are at the disposal of industry on a fee basis, and consultative services, testing, short trial studies and long-term investigations have been undertaken for hundreds of firms. The work has resulted in better products and in more efficient processing. The Foundation administers a grant from the Provincial Government to support postgraduate scholarships and scientific research in the universities of Ontario.

The Hydro-Electric Power Commission of Ontario.—The Research Division of Ontario Hydro, with a present staff of 300, provides testing, investigation and research services for all phases of the utility's engineering design, construction work, and system operation and maintenance. The Division maintains a close liaison with other research organizations and power utilities, and staff members participate in the committee work of major technical societies and standardizing associations.

Electrical investigations pertain to methods of generating, transmitting, distributing and utilizing power, and to improvement in equipment for these purposes. Among the topics studied are problems of electrical insulation; system operation and control, and system protection against lightning; communications and telemetering; illumination; and power metering. Attention is given to the performance and efficiency of power equipment, to improved measuring techniques, and to means of minimizing the hazards of electric shock.

Among the structural and mechanical topics studied are the following: soil mechanics as related to foundations, roads, and earth dams and dykes; the physical properties of structural components and of numerous items such as conductor joints and line hardware; the mechanical performance and safety features of equipment and various types of machines; metals and metallurgy; welding materials, techniques and applications; atmospheric and underground corrosion of metals; stresses in materials and structures; noise and vibration conditions; and a variety of problems associated with the design, construction and maintenance of concrete structures, the application of masonry materials, and the production, placement and quality control of all concrete used.