

The Saskatchewan Research Council was set up in 1947 under an Act of the Saskatchewan Legislature. The Council carries out research in the physical sciences with the aim of improving the provincial economy with particular emphasis on the commercial exploitation of provincial resources and the scientific aspects of business. At first the Council had no scientific personnel and laboratory facilities of its own, and carried out its research programs at the University of Saskatchewan by means of grants to members of the staff and scholarships to graduate students. The 1947 Act was amended in 1954 to empower the Council to acquire property, employ staff and conduct its own financial affairs. Laboratory buildings were erected on the university campus in 1958 and were extended in 1963. The present program places emphasis on technical assistance to industry and provincial government departments, research in the areas of metallic and industrial minerals, water, the environment, slurry pipeline transportation and selected aspects of agriculture. A large part of the program is carried out by a full-time staff of about 100 but some of the Council's research is still promoted by grants to university staff. The members of the Council consist of representatives of the Saskatchewan government, the university and industry.

Research Council of Alberta. The government of Alberta set up a scientific and industrial Research Council in co-operation with the University of Alberta in 1921 to promote mineral development within the province. Considerable effort is still directed toward the development of natural resources, but increasing emphasis is being given to research related to the establishment of new industries within the province, to transportation and to environmental problems. The principal areas of activity are fossil fuels development and utilization, geological surveys and research, groundwater, soils, industrial minerals, chemical product and process development, microbiology, technical assistance to industry, gasoline and oil testing, pipeline transportation, highway research, river engineering, environmental studies and hail research.

The operations of the organization are controlled by a Council of 15 individuals representative of the Alberta government, the universities and industry. The various research fields are reviewed by advisory committees of specialists drawn from industry, the universities and provincial government. The activities of the Research Council of Alberta are financed by provincial government appropriations and by contract research for private industry and federal agencies. The main Council laboratories and offices are located on the University of Alberta campus in Edmonton. A pilot plant and laboratory facility is located in the Clover Bar area east of the city. The full-time staff comprises approximately 280 scientists, engineers, technologists and supporting personnel.

B C Research performs a technical function for the British Columbia Research Council, a non-profit industrial research society with offices and laboratories at Vancouver, BC. This function is to enable even the smallest firms to improve their competitive position in Canadian and world markets by the use of the most up-to-date scientific knowledge. B C Research carries out contract research for clients on a confidential basis, initiates in-house research programs designed to promote and utilize the resources of the province, and provides a free technical information service in collaboration with the National Research Council. B C Research is active in the areas of applied biology, chemistry, engineering, physics, ocean engineering, operations research, industrial engineering, industrial market studies and economic feasibility studies.

9.4 Research and development expenditures

In 1972 Canada's current expenditures on research and experimental development in the natural sciences were estimated to be \$1,042 million, divided as shown in Table 9.1. The federal government is the major source of funds for research and experimental development providing 51% of the total current funds.

9.4.1 Federal expenditures

Information on the expenditures of the federal government on scientific activities is secured by two annual surveys carried out by Statistics Canada, one for the natural sciences and the other covering the human sciences. Each survey covers the actual costs of scientific programs for the preceding fiscal year and estimated expenditures for the following two years.