

laboratory facilities of its own, its research programs being carried on 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 the permanent staff numbering about 70 but some of the Council's research is still promoted by grants to university staff. The members of the controlling body, the Council proper, are appointed by the Lieutenant-Governor in Council and consist of representatives of the Saskatchewan government, the university and industry.

9.3.7 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 230 scientists, engineers, technologists and supporting personnel.

9.3.8 B C Research

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, operations research, industrial engineering, industrial market studies and economic feasibility studies.

9.4 University research

University research in Canada is funded from many sources. A large part of the total cost is covered by funds not specifically assigned to research activities. The proportion that should be attributed to research is often a matter of opinion as it concerns the apportioning of academic salaries between teaching and research, maintenance, etc. A special study conducted for the Science Council of Canada and the Canada Council indicated that in 1966-67 the total cost of research in Canadian universities was about one half of the total university expenditure. This analysis has not been repeated but no major change in the proportion is expected. Most of this cost is borne by the provincial jurisdiction over education and the federal responsibility for research.

The main components of research costs are: assisted research funds — grants and contracts to institutions or members of the staff; awards, such as research fellowships and scholarships; pro-rated value of faculty time devoted to research; and other indirect costs including pro-rated costs of libraries, administration, maintenance and publications. The appropriate