

GEOLOGY GRANTS TO UNIVERSITIES

Grants totalling \$75,000 have been awarded this year by the Geological Survey of Canada to 16 Canadian universities for research in the geological sciences. Ranging in size from \$300 to \$5,000, they are in support of 28 new and 15 continuing projects.

The 1961 amount brings the total of the grants since their introduction in 1951 to \$410,000. Their purpose is to stimulate and support geological research in Canadian universities, which, in turn, encourages promising students to pursue their graduate studies in Canada rather than abroad.

The awards, made on the recommendation of the National Advisory Committee on Research in the Geological Sciences, have been welcomed by university faculty members whom they enabled to pursue theoretical leads and provide answers to many geological questions. The results have been recorded in no fewer than 135 papers published in scientific periodicals over the past ten years. The awards are also serving to attract support from other sources, including industry.

APPORTIONMENT OF AWARD MONEY

The largest single grant this year, amounting to \$5,000, went to McGill University for a long-term project involving experiments on the behaviour of silicates and sulphides at high temperatures and pressures to find out more about the formation of ores and the metamorphism of rocks. In addition, McGill received grants totalling \$5,850 for four other projects.

Queen's University received \$7,900 in support of four projects, the largest being a grant of \$3,500 to help the Mineralogical Association of Canada publish "Mineralogy and Origin of Sudbury Ores", the work of an outstanding Canadian mineralogist. A \$1,600 grant is to support the annual publication of the "Canadian Mineralogist" by the Mineralogical Association of Canada.

For four new projects, the University of Alberta received grants of \$6,770. The largest of these, for \$3,000, is for fundamental research in geochronology aimed at evaluating some of the factors causing discordant "radioactivity" dates and thus helping to interpret absolute dates.

One continuing and four new projects at the University of Saskatchewan were assisted in the amount of \$6,720. Two of the new projects and the continuing one received \$2,000 each. One of these concerns the collection and study of Pleistocene invertebrate fossils in order to gain a better understanding of the environment prevailing during Pleistocene and early Postglacial times.

McMaster University received \$6,000 for one new and two continuing projects. The new project,

awarded \$3,000, is a geochemical study to develop criteria for the origin of rock types, based on statistical studies of their trace element contents.

Carleton University, awarded \$5,600, has three new projects this year, as well as one continuing study. The largest grant, \$2,000, is for a geochemical study of Austin Brook iron formation and isotopic investigation of sulphide deposits in the Bathurst area of New Brunswick.

The University of British Columbia received grants of \$5,500 for two continuing projects. One of them deals with lead isotopes and the origin of sulphide deposits, and the other, allotted \$4,000, is a study of trace elements in soils, rocks, and plants.

A \$5,500 grant to the University of Toronto will support two new studies -- one dealing with age and history of a Keewatin greenstone belt, and the other with investigation and development of improved methods for preparing interpretive cross-section of subsurface geologic structures.

The University of Manitoba, for one continuing and two new projects, was awarded \$4,290. One of the new projects, allotted \$1,700, is for quantitative study of ore minerals at Coronation Mine, Manitoba. It is a comprehensive study of the Coronation copper deposit, and several hundred samples of the ore have been collected for examination.

The Universities of New Brunswick and Western Ontario received grants of \$3,040 and \$3,030 respectively, the former for three new studies and the latter for one continuing and two new projects. At the University of New Brunswick two grants, each of \$1,320, are, one for a study of the stratigraphy of the Bourinot Group and the other for a detailed field and petrographic study of bodies of gabbro being explored for nickel in the Miramichi area. The Western Ontario grants include one for \$1,300 for a study of geophysical prospecting methods.

Dalhousie University was awarded \$2,500 for a continuing project of research on the chemistry of an inland sea, and the University of Ottawa received \$2,300 toward a study of conodont faunas in the St. Lawrence lowlands.

Grants of \$2,000 each were made to Ecole Polytechnique and Memorial University, while St. Francis Xavier received \$1,000. The grant to Ecole Polytechnique is for a continuing study to obtain a more thorough understanding of the distribution and composition of niobium-bearing minerals at Oka, Quebec. The award to Memorial University is for a new project concerning research into Cambrian stratigraphy and structure of St. Mary's area, Avalon Peninsula.