University Research in Canada

The *Annual Report on Support of University Research, 1964–65*, of the National Research Council and Medical Research Council of Canada gives detailed information on the former Council's programme of support for research in science and engineering and of the research awards of the Medical Research Council (Pp. vii+271. Ottawa: National Research Council and Medical Research Council, 1965. 50 cents). Direct university support totalled 17·8 million dollars, compared with 12·85 million dollars in 1963–64; of this, 1·86 million dollars was on postgraduate scholarships, 9·27 million dollars on operating research grants to university staff, and 2·1 million dollars on major equipment grants; 1·25 million dollars went to the Atomic Energy Control Board. Indirect support to universities totalled 1·29 million dollars. Lists of recipients of awards, scholarships and fellowships are included. Of the 7 million dollars expended on the extra-mural programme of the Medical Research Council (5·16 million dollars in 1963–64), 5·18 million dollars was on research grants, 610,109 dollars on fellowships, 348,823 dollars on scholarships, and 532,427 dollars on associateships. Lists of operating grants and of major equipment grants are included.

Eskimo Administration

The Arctic Institute of North America has recently published the third in a series of studies designed to cover the administrations of all groups of the Eskimo race other than that in Siberia. The first two studies dealt with Alaska and Canada, and the third (Arctic Institute of North America. Technical Paper No. 16: *Eskimo Administration*: 3; *Labrador*. By Diamond Jenness. Pp. 94. Montreal, Washington, D.C., and New York: Arctic Institute of North America, 1965) covers Labrador. The history of the Eskimos of the Labrador Atlantic coast begins with a tale of conflict with white settlers from the sixteenth century, when European fishermen began to appear in numbers in the southern area; this unhappy situation lasted until the late eighteenth century when two Moravian missionaries negotiated a truce between the Eskimos and the settlers to the south. It is possible that the history of contact between Europeans and the Eskimos began earlier than this, if the recent recognition of Viking settlement in Newfoundland can be related to the Icelandic saga of a peaceful meeting with "small ugly men with broad faces", who left the Vikings in peace. In any event, after two centuries of struggle, the negotiated truce allowed gradual white penetration of southern Labrador, and the Eskimos there withdrew and concentrated in Hamilton Inlet area until they were absorbed into the white population. In northern Labrador the Moravian missionaries created an amicable atmosphere through their pressureless but successful evangelistic endeavours. Contact with the external world came with the Hudson's Bay Company and Newfoundland fishermen, and the history of the Eskimos since the mid-nineteenth century has been of increasing assimilation into and emulation of European and Canadian standards of dress, economy and customs. The outstanding lesson to be learned from this period in Labrador is simply that of the unqualified success of the Moravian missions, which, through devout yet eminently practical methods, painlessly achieved for the Eskimos a respected place in Newfoundland affairs; further advances will depend on the Eskimos of northern Labrador themselves.

Advances in Oceanography

A third volume of *Progress in Oceanography*, edited by Mary Sears, of Woods Hole Oceanographic Institution, for the Pergamon Press, commemorates the seventy-fifth birthday of Prof. Hans Pettersson in 1963 (Pp. xxiii+407. London and New York: Pergamon Press, 1965. 105*s*. net). It contains thirty articles by his former students and colleagues. The majority deal with the sea floor and its sediments, to which a wide range of scientific techniques have successfully been applied. The remaining contributions deal with aspects of geophysics, marine chemistry and biology. The present volume departs somewhat from the systematic review of outstanding problems which was one of the main objects of the series, but it achieves the overall purpose of keeping oceanographers, and others interested in the sea, conversant with recent research and advances over a wide field. It is an appropriate and timely reminder of Prof. Pettersson's pioneering achievements. The third volume of *Oceanography and Marine Biology*, an annual review edited by Harold Barnes for George Allen and Unwin, Ltd., appears at the same time (Pp. 421. London: George Allen and Unwin, Ltd., 1965. 84*s*. net). Two-thirds is devoted to marine biology, particularly the systematics and distribution of chaetognaths, and the endocrine physiology of polychaetes and fishes. The remainder consists of review papers on waves, the carbon-dioxide system in the sea, exchange of chemical substances between sea and air, disposal of waste and pollution of the sea, conditions for life on the abyssal sea-floor, the biology of the north-east Atlantic herring population, and on the methods of determining phosphorus in sea water. Both books tend to serve as bound scientific journals containing some description of original work as well as review articles, and will probably be most useful in filling gaps between the journals and text-books and in emphasizing the unity of environmental science.

Effect of Duration of Curing on Slag–Portland Cement Concrete

The use in concrete of ground blast-furnace slag mixed with Portland cement has in some countries been increasing during the past decade, and in view of the incomplete concrete curing procedures commonly adopted on construction sites in South Africa, it was decided that the effects of such limited curing of Slag–Portland cement concrete should be investigated. This has been done and the results are embodied in a paper by G. J. R. van der Meulen entitled *Effect of Duration of Curing on Slag–Portland Cement Concrete* (National Building Research Institute, South African Council for Scientific and Industrial Research, Pretoria. CSIR Ref. No. *R/BOU* 158. Reprinted from *Construction in Southern Africa*, **10**, 9; January 1965). The trend of this work was to compare the compressive strengths of various slag–Portland cement concretes with similar Portland cement concretes when they were continuously wet-cured until tested and when they were allowed to dry out after one day of wet curing. The object was to reproduce the effects of the best and the worst curing which concrete is likely to undergo in building practice. The results are not without a wider significance in other countries. From the experiments carried out, it was found that the effects of inadequate curing on slag–Portland cement concrete are severely adverse. The compressive strength of slag–Portland cement concrete is more sensitive to the effects of limited curing than that of similar Portland cement concrete. "The investigations showed that in nearly all cases the strengths of dry cured slag–Portland cement concretes at three months were not as great as those of similar Portland cement concretes developed after six days under the same curing conditions". It is concluded that it is therefore important to pay special attention to adequate wet-curing of slag–Portland cement concrete, particularly if it is used in thin sections. The paper includes details of mixes used, ages at test, and comparative graphs of compressive strengths of wet- and one-day-cured specimens of slag–Portland cement and normal Portland cement concretes, and also contains a short list of references to other workers who have been concerned with similar problems.