

NATIONAL RESEARCH COUNCIL OF CANADA

THE twenty-second annual report of the National Research Council of Canada for the year 1938-39 includes the report of the president, Major-General A. G. L. McNaughton, together with the financial statement printed both in French and in English. The review of activities of the Council has this year been published separately.

The president's report refers briefly to work in the Division of Biology and Agriculture on difficulties experienced in the curing and transport of 'Wiltshire bacon' intended for the British market, as well as to other researches on the storage and transport of food. A report on the comparative malting qualities of nineteen barley varieties grown in Canada has been issued in co-operation with the University of Manitoba, and improved methods of predicting the malting qualities of new barleys have been worked out so that satisfactory results can be obtained from small samples. Much progress has been made with investigations on the practical applications of plant hormones, and a commercial hormone powder is now on the market. Promising results have been obtained in co-operation with the Central Experimental Farm in producing a hardy, large-seeded perennial forage plant for the drought areas by crossing wheat with wheat grasses. A new apparatus has been constructed for the measurement of gas production of fermenting doughs with the view of improving baking practice.

In the Division of Chemistry, which has been re-organized during the year, tests were carried out in regard to the production in Canada of face-pieces for gas masks, as well as on the construction and testing of gas-mask containers and the production of adsorbent charcoal. The investigation of domestic barks as sources of tanning extracts continued, and a thorough study was made of the factors entering into the preparation from skimmed milk of rennet casein of a quality suitable for the manufacture of plastics, particularly buttons. Tests are being carried out on the treatment of casein to render it suitable for high-speed injection moulding. Progress in work on magnesium products in the laboratory has been so marked that payments to Canadian railways for freight on the products from the co-operative companies' plants each year now amount to almost as much as the total sum spent on the investigation since the work commenced more than twelve years ago. Fundamental information regarding plasticizing agents has been successfully applied to several types of acid, basic and neutral refractory cements, which are now being manufactured commercially. Laboratory work on the production of asbestos fibre for filtration purposes has been completed and filtration tests carried out on the material. A satisfactory laboratory method for the synthesis of organic selenides has been developed, and the value of selenium compounds as anti-knock agents for motor fuels is being investigated.

Work on the snow performance of aircraft skis has continued, and the Council participated in a comprehensive investigation of aviation fuels under the auspices of the Society of Automotive Engineers. Much work was done for Government Departments, especially on aircraft instruments for the Department of National Defence. Models of ships for Government service were tested by naval architects in the model testing basin.

APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

TEACHER OF PRODUCTION ENGINEERING—The Principal, Dolcoath Technical School, Camborne, Cornwall (July 31).

DEMONSTRATOR (male) in the Department of Physiology—The Medical School Secretary, Middlesex Hospital, W.1.

REPORTS AND OTHER PUBLICATIONS

(not included in the monthly Books Supplement)

Great Britain and Ireland

University of Bristol. The Annual Report of the Agricultural and Horticultural Research Station (The National Fruit and Cider Institute), Long Ashton, Bristol, 1939. Pp. 160+7 plates. (Bristol: The University.) [206]

Freshwater Biological Association of the British Empire. Eighth Annual Report for the Year ending 31st March 1940. Pp. 82. (Amble-side: Freshwater Biological Association.) 1s. 6d. [246]

Ministry of Agriculture and Fisheries. "Growmore" Bulletin No. 3: Preserves from the Garden. By B. Alice Crang and Margery Mason. Pp. ii+30. (London: H.M. Stationery Office.) 4d. net. [246]

Royal Botanic Gardens, Kew. Bulletin of Miscellaneous Information, 1939. Pp. iv+630+4 plates. (London: H.M. Stationery Office.) 15s. net. [256]

The Lister Institute of Preventive Medicine. Report of the Governing Body, 1940. Pp. 32. (London: Lister Institute.) [276]

Ministry of Home Security. Air Raids: What you must Know, What you must Do. Pp. 64. (London: H.M. Stationery Office.) 3d. net. [27]

Other Countries

Canada: Department of Mines and Resources, Mines and Geology Branch: National Museum of Canada. Bulletin No. 94 (Anthropological Series No. 25): Lawson Prehistoric Village Site, Middlesex County, Ontario. By W. J. Wintenberg. Pp. iv+104. 25 cents. Bulletin No. 95: Annual Report of the National Museum for the Fiscal Year 1938-39. Pp. 24. 10 cents. (Ottawa: King's Printer.) [176]

Canada: Department of Mines and Resources: Bureau of Geology and Topography, Geological Survey. Memoir 219: Halfway Lake—Beresford Lake Area, Manitoba. By C. H. Stockwell and C. S. Lord. Pp. vi+68+1 plate. 25 cents. Memoir 220: Mining Industry of Yukon, 1938. By H. S. Bostock. Pp. iv+18+3 plates. 10 cents. (Ottawa: King's Printer.) [176]

Commonwealth of Australia. Thirteenth Annual Report of the Council for Scientific and Industrial Research for the Year 1938-39. Pp. 110. (Canberra: Commonwealth Government Printer.) 4s. 6d. [206]

Proceedings of the United States National Museum. Vol. 88, No. 3078: Trematodes from Fishes mainly from the Woods Hole Region, Massachusetts. By Edwin Linton. Pp. 172+26 plates. (Washington, D.C.: Government Printing Office.) [206]

Southern Rhodesia Geological Survey. Short Report No. 31: Geological Report on the Norton Gold Belt. By R. Tyndale-Biscoe. Pp. 10. (Salisbury: Government Printer.) [246]

The South African Journal of Science. Vol. 36: Being the Report of the Thirty-seventh Annual Meeting of the South African Association for the Advancement of Science, East London, July 3-8, 1939. Pp. xx+578. (Johannesburg: South African Association for the Advancement of Science.) 30s. net. [246]

Uganda Protectorate. Annual Report of the Geological Survey Department for the Year ended 31st December 1939. Pp. 38. (Entebbe: Government Printer.) 2s. [246]

Nyasaland Protectorate. Annual Report of the Forestry Department for the Year ended 31st December 1939. Pp. 28. (Zomba: Government Printer.) [246]

Imperial Council of Agricultural Research. Miscellaneous Bulletin No. 30: Biological Notes on Indian Parasitic Chalcidoidea. By Dr. Hem Singh Pruthi and M. S. Mani. Pp. 50+22 plates. (Delhi: Manager of Publications.) 3.6 rupees; 5s. 6d. [246]

Report of the Botanical Survey of India for 1938-39. Pp. 14. (Calcutta: Government of India Press.) [246]

Memoirs of the Geological Survey of India. Vol. 75: A Catalogue of Meteorites, with Special Reference to Indian Falls and Finds and to Specimens in the Indian Museum, Calcutta, as on August 1st, 1939. By Dr. A. L. Coulson. Pp. iv+346+6 plates. (Calcutta: Geological Survey of India.) 4.8 rupees; 7s. [246]

Memoirs of the Royal Asiatic Society of Bengal. Vol. 12, No. 2: The Alleged Pugnacity of the Swordfish and the Spearfishes as shown by their Attacks on Vessels. (A Study of their Behavior and the Structures which make possible these Attacks.) By E. W. Gudder. Pp. 215-315+plates 3-9. (Calcutta: Royal Asiatic Society of Bengal.) 7.14 rupees. [246]

Year-Book of the Royal Asiatic Society of Bengal for 1939. Vol. 6, 1940. Pp. 203. (Calcutta: Royal Asiatic Society of Bengal.) 4.14 rupees. [266]

Annual Report of the Indian Central Cotton Committee for the Year ending 31st August 1939. Pp. iv+192. (Bombay: Indian Central Cotton Committee.) 2 rupees. [266]

Summary Proceedings of the Forty-first Meeting of the Indian Central Cotton Committee, held on the 19th and 20th January 1940. Pp. 60. (Bombay: Indian Central Cotton Committee.) 1 rupee. [266]