

The Plant Chemistry Laboratory and the Dominion Laboratory have installed a plant for the preparation of antibiotic substances, and small quantities of penicillin have already been made.

The Geological Survey has continued its field-work in connection with surveys of coal, clays, and sands. The Dominion Laboratory has had the examination of high-sulphur coals carefully carried out with a view to devising methods for reduction or elimination of their sulphur content. Similarly, a thorough examination of New Zealand's clay and sand resources, which have distinct industrial possibilities, is being undertaken conjointly by the Geological Survey, Dominion Laboratory, and the Ceramic Research Association.

Frost-fighting investigations in Central Otago and Auckland have been a combined effort on the part of the Plant Diseases Division, Meteorological Office, Auckland Industrial Development Laboratories, and Dominion Physical Laboratory. The initial year's work has provided some very useful data which will be helpful for future investigations.

Phormium research has been intensified during the year under the leadership of the Botany Division, special attention being devoted to measures to overcome yellow-leaf disease and to propagation and management studies.

The fruit research activities of the Department have been reorganized and consolidated into a branch under a Director. Special attention has been devoted to research problems affecting building and civil engineering, concerning which Sir Reginald Stradling paid a visit to New Zealand at the invitation of the Government and furnished a valuable report on his observations. This report will provide a sound basis for future developments.

The visit of Sir Ben Lockspeiser enabled an assessment to be made of the Dominion's possibilities and responsibilities in connection with aeronautical research.

The Canterbury Project, an investigation on anomalous radar propagation carried out conjointly by the United Kingdom and New Zealand Governments at Ashburton, concluded its field-work after a very successful season. The mass of data accumulated during the 1947 season is now being worked up.

Defence science matters have been reviewed extensively during the year, and an organization established for providing effective liaison with the Services.

The Research Council has met on seven occasions during the year, and the Department is indebted to it for its active interest in all research activities and developments and for the advice and guidance received from it. Its personnel was as follows:—

T. Rigg, K.B.E., M.A., M.Sc., F.R.I.C., F.R.S.N.Z., Chairman. J. C. Andrews, Ph.D., M.Sc. T. G. G. Beck, A.M.I.C.E. N. L. Edson, B.Med.Sc., M.B., Ch.B., Ph.D. (Cantab.). R. O. Page, D.Sc. J. M. Ranstead, Esquire. W. Riddet, B.Sc. (Agric.), N.D.A., N.D.D. R. B. Tennent, N.D.D. D. F. Sandys Wunsch, M.A. (Oxon.), B.Sc. (McGill), M.I.Chem.E., Assoc. Inst.M.M. E. Marsden, C.M.G., C.B.E., M.C., D.Sc., F.R.Sc., F.R.S.N.Z., Secretary. F. R. Callaghan, M.A., F.R.E.S., Deputy Secretary.

Council sustained a severe loss during the year through the death of Mr. T. G. G. Beck. His death was most regrettable, in that the Council lost thereby the assistance of an outstanding engineer of wide experience, sound judgment, and extensive interests.

On the 20th September, 1947, Dr. Marsden left New Zealand to take up an appointment as Scientific Liaison Officer and New Zealand Government Scientific Adviser in London. Dr. Marsden had been Permanent Head of the Department since its establishment in 1926. His high eminence as a scientist, his foresight, inspiration, initiative, energy, ability, and personality, had been responsible for the sound progress made by the Department during the first critical twenty-one years of its existence.

To foster closer association between the University, the Research Council, and the Department, a Liaison Committee was established to consider periodically matters of mutual interest.