

BACTERIOLOGY

It has been found necessary for the adequate control of milk and water supplies to undertake a certain amount of bacteriological work. A start has been made with this in Auckland and Christchurch, and this work will be extended as staff and equipment become available.

GAS-TESTING

The gas-supplies of the four main centres and of most of the other main towns of the Dominion were regularly examined for calorific value, pressure, and freedom from sulphuretted hydrogen. All gas-meters put into service were tested and stamped before being passed for use. This involved the accurate testing of many thousands of meters.

LIBRARY

To ensure that the Library will be kept up to date by additions of the latest textbooks, a Library Committee consisting of three senior members and the Librarian has been set up.

A considerable number of books has been received during the year and a few new subscriptions to journals have been taken out. Two of the French journals which ceased to come during the war years are again arriving regularly.

The monthly accessions list is now circulated to all members of the staff and to several departmental libraries.

A wide variety of inquiries on matters of applied chemistry have been dealt with, whilst a good number of library interloan requests have been received, as well as approximately fifty requests through this means being made by members of the Laboratory staff.

PAPERS PUBLISHED IN SCIENTIFIC JOURNALS BY MEMBERS OF THE STAFF

Although most of the work of the Laboratory is unsuitable for publication or is not available owing to its confidential nature, the following papers by members of the staff were published during the year :—

- “ A Rapid Determination of the Alkalies in Portland Cement.” J. J. S. Cornes. *N.Z. J. Sci. & Tech.*, 26 (1945), 239.
- “ A Simplified Analysis of Serpentine for Acid-soluble Magnesia.” J. J. S. Cornes. *N.Z. J. Sci. & Tech.*, 26 (1945), 188.
- “ The Microscopic Structure of Oxford Chalk.” J. J. S. Cornes. *N.Z. J. Sci. & Tech.*, 26 (1945), 185.
- “ Water-insoluble Alkali in Ash.” J. J. S. Cornes. *N.Z. J. Sci. & Tech.* 26 (1945), 190.
- “ Clay Deposits near Levin.” L. R. L. Dunn and I. C. McDowall, with E. O. Macpherson of the N.Z. Geological Survey. *N.Z. J. Sci. & Tech.*, 26 (1945), 307.
- “ Clays of the Mount Somers District.” H. W. Wellman, of the N.Z. Geological Survey, with L. R. L. Dunn and I. C. McDowall. *N.Z. J. Sci. & Tech.*, 26 (1945), 311.
- “ The Utilization of New Zealand Ironsands as a Source of Iron, Titanium, and Vanadium.” B. Mason. *N.Z. J. Sci. & Tech.*, 26 (1945), 227.
- “ Heat-evolution Characteristics of New Zealand Portland Cements.” L. R. L. Dunn and F. T. Seelye. *N.Z. J. Sci. & Tech.*, 27 (1945), 157.
- “ Contributions to the Mineralogy of New Zealand.” C. O. Hutton, of the N.Z. Geological Survey, and F. T. Seelye. *Trans. Royal Soc. of N.Z.*, 75. (1945), 160.
- “ A Review of the Electro-plating Industry in New Zealand.” (New Zealand Institute of Chemistry Industrial Chemical Prize Essay). M. Fieldes. *N.Z. Institute of Chemistry*, 1945.
- “ Boron and Strontium in New Zealand Coal Ashes.” F. T. Seelye and T. A. Rafter. *Nature*, 1945.
- “ Losses of Iodide from Iodized Salt.” R. L. Andrew and G. W. Stace. *Analyst*, 70 (1945), 88.