

The fundamental study of the relationship between the constituent properties and body properties (fired and unfired) in the felspar-quartz-clay field has proceeded to the stage of preparation of precise standard body components, and the development of techniques for ceramic experimentation on a scale of 20–100 gm. This has been necessary through the absence of any previous reported work in this field.

Test methods of value to ceramic research and industrial control have been critically examined, such as particle size determination, mineralogical analysis by thermal analysis methods, spectrochemical analysis for Fe_2O_3 , CaO , alkalies, &c.

General.—Many projects of smaller scale have been commenced, such as the listing and assessment of pottery plasters, and the nature of grinding pebbles and cylinder linings for grinding-mills.

Papers have been presented by the staff and members of the Technical Committee on "Physico-chemical Aspects of Ceramics," "The Part of Ceramics in Modern Life and Industry," "The Theory and Practice of the Andreasen Pipette Method of Particle Size Analysis," "The Testing of Glazes on Domestic Wares," and "The Physical Testing of Electrical Porcelain Glazes."

The circulation of literature—not published in the usual journals—from outside New Zealand has been the only contribution so far possible in the nature of an information service.

NEW ZEALAND WOOLLEN-MILLS' RESEARCH ASSOCIATION (INC.)

Director: Professor F. G. SOPER

Numerous problems submitted by the mills, Government Departments, &c., have been dealt with, besides the routine tests for shrinkage, grease contents of scoured wools, &c. A number of fibre-fineness measurements were carried out on greasy wool and tops to check a mill's standards for fineness in buying and uniformity in sorting wool. The formation of neps during carding was investigated, and some preliminary trials made. A considerable number of miscellaneous faults caused in the mill or after the material has left the mill have been investigated, and these usually required individual treatment.

Facilities for technical education in the textile industry by means of correspondence courses were devised, and the initial parts of some of the courses were nearing completion.

The Dri-Klor certification mark, to be reserved to manufacturers in New Zealand, was accepted by the Patent Office, and registration automatically followed.

A considerable number of visitors, including some from overseas, inspected the research work in progress at the laboratories.

Two bulletins were issued during the year in which many papers of technical interest appeared.

RESEARCH INSTITUTE OF LAUNDERERS, DRY-CLEANERS, AND DYERS OF NEW ZEALAND (INC.)

Cabinet approved the incorporation of the Institute with an assurance of a pound-for-pound subsidy on contributions.

In view of the difficulty of securing a suitable person to direct the Institute's activities, the Management Committee decided to select a New Zealand graduate and train him here and overseas to fill the senior technical position.

Problems requiring scientific assistance have in the meantime been referred to the Dominion Laboratory or to the appropriate overseas organization. These included damage to surgeons' gloves; washing and shrinkage of woollens, including blankets; suitability of starch extender; and layout of new laundry. The Fuel Efficiency Service supplied by the Dominion Laboratory has been of great assistance to many members. Difficulties having been experienced by importers of laundry machinery clothing, necessary