

It is probably a mistaken policy in New Zealand to offer research scholarships in industrial science to young graduates, for their training in research methods and their knowledge of the field of pure research must of necessity be extremely limited, while their knowledge of the methods and problems of industry is almost nil.

Such research work as has been carried on in New Zealand is hampered at all points by the lack of a reasonably complete and accessible scientific and technological library, and this lack is undoubtedly the reason that New Zealand research as a whole has not reached a higher standard both in pure and applied science. It is certain that any Government scheme for the organization of research must fall far short of the best results until such a library is constituted. . . .

The main needs of industry are research on special problems, some of which have already been defined and partially solved, while others await solution and in some cases even definition. Such problems are the utilization of inferior coals, the economic smelting of Taranaki ironsands, the recovery of kauri-gum from snags, the preparation of fibre from flax, the utilization of the waste in the fish and meat industries for oil and fertilizers, the exploitation of peat bogs, and many others. An important function of any body set up to organize research will be the survey of the industries of the Dominion with a view to a complete and exact definition of the problems awaiting solution. . . .

The weak points of the present system as regards science are that scientific men are placed under administrative officers who have little or no knowledge of science, there is a great danger of lack of co-operation between the scientific men of different Departments, and the various Departments each strive to build up a reference scientific library without any regard to the other Departments. There is no provision, such as exists in the Government of India, for a Board of Scientific Advice, which would review annually the proposed problems of those industries not directly provided for by department or sub-departments. . . .

(2.) Organization of Scientific and Industrial Research in New Zealand: Report by G. Hogben, Esq., C.M.G., and Dr. J. Allan Thomson, 2nd October, 1917.

At the annual meeting of the New Zealand Institute on the 31st January, 1917, the following resolutions, among others, were passed:—

- (1.) That scientific research be endowed to a very much greater extent than has been done in the past.
- (2.) That the importance of research in pure science be recognized as of equal importance with that in applied science. . . .

The subject was also considered on the 1st February, 1917, by the Board of Science and Art, and the following resolution, among others, was adopted:—

- (1.) That, in accordance with section 9 (2) of the Science and Art Act, 1913, this Board advises the Government to constitute a General Advisory Board for the Co-ordination of Science and Industry. The Board so constituted should include representatives of the business, industrial, and agricultural sections of the community, and of scientific men and educational experts. That, further, Local Advisory Committees of similar constitution be formed in the chief centres. . . .

The General Council of Education in 1917 adopted the following recommendations:—

- (1.) There should be a National Advisory Council on Research, consisting of (a) four scientific men, one of whom should be a scientific expert attached to a Government Department, (b) three members connected with the leading industries of the Dominion, one of whom should represent agriculture.
- (2.) The National Advisory Council should—
 - (i.) Consider and allot to the proper persons for investigation all proposals for specific researches (or at its discretion such proposals). The proposals might be referred to it by the Efficiency Board, or might come from institutions or societies or private persons, or might originate in the Council itself.
 - (ii.) The Council might also consider the problems affecting particular industries, to determine along what lines research might be instituted.
 - (iii.) The Council should award and supervise the tenure of the Research Fellowships mentioned below, and should, on the request of the University of New Zealand, consult with and advise the Senate of the University in matters relating to the National Research Scholarships in the award of that body.
 - (iv.) The Advisory Council should consider and advise the General Council of Education as to the lines along which there could be brought about a general improvement in scientific education with a view to the training of experts, and should co-operate with that Council and other public bodies in taking such steps as may lead to the better appreciation of the aims and advantages of science on the part of producers and the general body of citizens.
- (3.) In addition to the existing National Research Scholarships (the number of which should be increased) there should be established Research Fellowships tenable for two, three, or more years by men or women qualified and willing to conduct researches approved by the Council. (The fellowships should be of sufficient value to prevent the possible holders from being attracted away to other positions.) . . .