

hazard testing, fish culture, gas research, hydraulic research, industrial radiology, laundry research, leather research, magnesium products, medical research, metallic magnesium, radio research, storage and transport of food, survey research, transshipment of perishables, wool, and other subjects. Co-operation with outside organizations is maintained through each of these, so that the Council has active contact with almost every scientific laboratory in Canada whether in a university, a Provincial or Dominion Government Department, or a private organization. The benefits to the progress of research within and without the Council's own laboratories are obvious.

**Financial Assistance for Research.**—In the development of co-operative research it frequently becomes necessary to give some financial assistance to a co-operator whose abilities should be utilized, but whose laboratory is insufficiently equipped with special apparatus, or who requires additional personnel for the proposed work. For this purpose the National Research Council has devised a system of grants known as assisted research grants. These are available only to persons who are recognized as capable research workers and whose laboratories possess the fundamental apparatus for the type of work to be done. The grants are made only for the purposes of investigations approved by the Council, and may be used only to purchase special apparatus and to employ assistants whose training and experience are regarded by the Council as satisfactory. These grants have resulted in much valuable scientific investigation by workers in Canadian universities, at a minimum of cost to the country. They have enabled the Council to assist qualified scientists whose services could not have been utilized without the financial assistance, in many cases quite small, that was supplied. In addition, research has been stimulated, particularly in the smaller institutions and those with limited financial support. This in itself adds materially to the scientific strength of Canada.

Another means of assistance to the development of science and technology in Canada is found in the Council's system of scholarships. These are awarded to students of high attainments to enable them to proceed with training in research in approved research laboratories under investigators of proved ability. The scholarship holders must engage in actual research, and their work as students, while equipping them for careers in scientific work, adds to the general store of knowledge and assists the investigators with whom they are associated to contribute to Canada's research effort. Many of the posts in research in Canada to-day are being held with distinction by scientists to whose training National Research Council scholarships contributed in no small degree.

**Research Carried on by the National Research Council.**—In this article it is not intended to list in detail the investigations that have been completed or are under way, but to give a few examples, chosen arbitrarily, to provide a picture of types of work undertaken.

Investigations dealing with storage and transportation of food have resulted in improvement of the methods of pre-cooling and packaging poultry. Maintenance of the quality of poultry held in cold storage has been assured by means of new developments in packaging the poultry and by humidifying the freezers. Considerable success has been achieved in efforts to improve railway refrigerator cars; remodelled and new cars designed as a result of this work are now in operation. Other investigations along this line deal with the development of automatic heater controls for refrigerator cars. A comprehensive study of the steps in the preparation of bacon for the export market has been carried on with the co-operation and support of the Dominion Department of Agriculture and the packing industry. This