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THE WORK OF THE NATIONAL RESEARCH COUNCIL  
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(A summary of the Council's work in 1948 issued  
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It has been an effective and highly productive year in the activities of the National Research Council at Ottawa. With a staff of more than 2600 persons, many of whom have won wide recognition in their respective fields, the Council now occupies a very creditable place in the scientific world. In 1948, for the first time, the Council awarded 19 post-doctorate fellowships each tenable for one year in the Division of Chemistry of which Dr. E.W.R. Steacie, F.R.S., is the Director. Holders of these fellowships include men trained in English and Scottish universities and institutions in Holland and Denmark.

Heretofore, the trend in post-graduate research has always been from Canada to other countries, mostly the United States and Europe. It is a mark of progress that the flow of scientists is now moving in both directions and it is a notable achievement for Canadian scientific workers to be selected as the guides and mentors of mature investigators who have been trained in the older and famous European centres of learning.

Award of these fellowships indicates also a movement in Canadian research towards a greater concentration of effort in the field of pure science than was possible during the war years. The Council's programme of investigations now more nearly represents the nice balance between pure and applied research, which is considered essential to continued productive effort. Freshness of approach to industrial research problems, can only be maintained through intensive studies which have for their object the discovery of new knowledge. Gone is the day when "pure" research was pursued only in the universities; progressive scientific institutions everywhere now recognize the fundamental value and importance of carrying on research in pure science within their own organizations as an essential means of promoting the successful prosecution of industrial problems.

The National Research Council's Atomic Energy Project at Chalk River has enjoyed a successful year of operation of its heavy water pile or nuclear reactor. This has afforded the highest flux of neutrons available anywhere for experiments and for the production of radioisotopes. Radioisotopes have been supplied to 19 approved laboratories across Canada. Highlights of research include a new approach to the measurement of the mass of the neutron made possible by the high flux of neutrons in the pile. This indicated that the hitherto accepted value might be significantly low. Much knowledge has been gained of the effects of radiations on various substances. The instrumentation for the measurement of radiations has been