



CANADIAN WEEKLY BULLETIN

INFORMATION DIVISION
DEPARTMENT OF EXTERNAL AFFAIRS
OTTAWA - CANADA

Vol. 4 NO. 9

January 7, 1949

INDEX TO INSIDE PAGES

Highest Peacetime Production in 1948.....	2-3	Organize Against Cancer.....	6
Export Trade Booming.....	3-4	Cost-of-Living Down.....	9
Peak Mineral Production.....	4	Department Store Sales.....	9
Motor Vehicle Sales.....	4	Caribbean Exercises.....	9
Apprenticeship Agreement.....	4-5	Spring Cruise Program.....	9
Trade With West Indies.....	5	Dollar Holdings \$998,000,000.....	10
T. & C. Associate Deputy.....	6	Cattle & Beef-\$100,000,000.....	10

WEEK'S EVENTS IN REVIEW

SCIENTIFIC RESEARCH, 1948: 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, the Council reports in its review of 1948.

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, proceeds the review.

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 program of investigations now more nearly represents the nice balance between pure and applied research, which is considered essential to continued productive effort....

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 considerably advanced. In the field of biology interesting results have been obtained on the effect of radiation in producing chromosome breaks.

In December a highly successful conference on the use of isotopes in industry was held in Ottawa to acquaint Canadian industrialists with possible uses of radioactive isotopes now being produced at Chalk River....

Group discussions followed in which the industrial representatives were shown how the radioactive materials produced at Chalk River could be used in the control of industrial processes. For example, the amount of wear on a bearing can be determined easily and accurately; the thickness of gold plating on