

notable achievement is the discovery of insulin, a preparation which indefinitely prolongs the lives of those suffering from diabetes, by Dr. F. G. Banting, Dr. J. B. Collip and Mr. C. H. Best, working under the supervision of Prof. J. J. R. Macleod, Professor of Physiology in the University of Toronto. The Nobel prize in medicine for 1923 was awarded to Dr. Banting and Dr. McLeod for their discovery, and in the same year Parliament voted to Dr. Banting a life annuity of \$7,500, to enable him to devote himself entirely to medical research.

The importance of scientific and industrial research has been recognized in recent years by the creation of the Honorary Advisory Council for Scientific and Industrial Research, now known as the National Research Council and by the establishment of provincial research organizations, notably the Research Council of Alberta and the Ontario Research Foundation. Provincial research organizations are also being formed in Saskatchewan, Manitoba and Nova Scotia.

Subsection I.—The National Research Council.¹

Established in December, 1916, by the Dominion Government, the Honorary Advisory Council for Scientific and Industrial Research, as it was then called, found itself greatly handicapped during its early years by a lack of laboratory facilities. The only research laboratories of any consequence existing in Canada at that time were those of the universities, where many valuable researches were even then under way, but where the work was often seriously limited by lack of funds. This deficiency the National Research Council undertook to remedy, in particularly urgent cases, by the provision of special equipment or much-needed technical assistance. The serious shortage of scientifically trained men which the country was then experiencing led to the establishment of post-graduate research scholarships in the universities. Advisory committees were also created in some of the more important branches of science and technology, in order that the Council might have the benefit of the advice of specialists in extending its various activities.

Since 1924 the work of the Council has been largely expanded through the establishment of a number of research committees to undertake investigations on major problems, some of them of national importance. Arrangements were at first made for co-operative researches in the laboratories of Dominion and Provincial Government departments and the universities. More recently provision has been made for research work by the Council's own staff in laboratories of a more or less temporary character, and construction has been started of National Research Laboratories in which the Council will, it is hoped, be able to carry out effectively the various responsibilities assigned to it by the Research Council Act.

Organization and Staff.—The Council itself consists of 15 members, each of whom, with the exception of the president, is appointed for three years and serves entirely without remuneration. Its membership includes specialists in science, executives in the universities and the industries, and representatives of government departments that are carrying on scientific or industrial research.

The chief executive officer of the Council is the President. Responsible directly to him are the Secretary-Treasurer, in charge of the administrative staff, and the directors of the various professional divisions. The divisions already

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