

To undertake the investigation and standardization, at the request of any of the industries of Canada, of the materials which are or may be used in, or of the products of the industries making such a request;

To undertake researches, the object of which is to improve conditions in agriculture.

The Act also provides that the Research Council shall have charge of and direction or supervision over the researches which may be undertaken by or for single industrial firms, or by such organizations or persons as may desire to avail themselves of the facilities offered for this purpose. The Council is also empowered to publish from time to time such scientific and technical information as it may deem necessary.

It is evident that in order to carry out all of its duties the Research Council would require just such apparatus, equipment and facilities as would be provided in a Research Institute. Pending the provision of such facilities, however, the Council is working along the following chief lines of endeavour:

(1) *Training of research workers.*—Most of the research work done in Canada up to the present time has been carried out in the laboratories of the large universities, where the professors and other officers of instruction have devoted most of their spare time to the solution of technical and scientific problems. Private subscription has to some extent provided the means of employing recent graduates to assist experienced research workers, and this, though on a very limited scale, has been the means of developing some excellent research talent. Recognizing the value of this work in training the right kind of men for research in scientific and industrial laboratories, the Research Council has devoted about one-third of its annual appropriation to provide bursaries, studentships and fellowships for the purpose of enabling a larger number of graduates to follow up this line of work. In all 201 awards have been made to 117 persons at 18 universities. Of these 117 grantees, 29 are engaged in teaching, mostly in our universities, 17 have taken positions in various industries, 16 are employed in technical work of the Dominion and Provincial Governments and nearly all the others are continuing their post-graduate studies.

(2) *Assisted researches.*—The successful prosecution of scientific research demands the attention of the most highly trained specialists available. In order to secure the services of the most highly qualified men available in Canada for such work, the Research Council has adopted the plan of awarding grants which they may secure to assist in the prosecution of approved investigations, and which may be used by them to purchase special scientific equipment or to secure the services of qualified assistants to work under their supervision.

(3) *Associate committees.*—The spirit of co-operation shown by the leaders in industry and science has made it possible for the Research Council to form advisory committees of specialists in various branches of industry and science to confer with the members of the Research Council on the various problems which are brought up for consideration. Like the members of the Council itself, these members of the associate committees serve without remuneration. Through them, problems are brought to the attention of the Council and through them also, industry is being made acquainted with the service which the Council can render to the country at large.