

(ii.) Proposals for establishing or developing special institutions or departments of existing institutions for the scientific study of problems affecting particular industries and trades.

(iii.) The establishment and award of Research Studentships and Fellowships.

The Advisory Council will also be available, if requested, to advise the several Education Departments as to the steps which should be taken for increasing the supply of workers competent to undertake scientific research.

Arrangements will be made by which the Council will keep in close touch with all Government Departments concerned with or interested in scientific research and by which the Council will have regard to the research work which is being done or may be done by the National Physical Laboratory.

It is essential that the Advisory Council should act in intimate co-operation with the Royal Society and the existing scientific or professional associations, societies and institutes, as well as with the universities, technical institutions, and other institutions in which research is or can be efficiently conducted.

It is proposed to ask the Royal Society and the principal scientific and professional associations, societies and institutes to undertake the function of initiating proposals for the consideration of the Advisory Council, and a regular procedure for inviting and collecting proposals will be established. The Advisory Council will also be at liberty to receive proposals from individuals and themselves to initiate proposals.

It is contemplated that the Advisory Council will work largely through sub-committees reinforced by suitable experts in the particular branch of science or industry concerned. On these sub-committees it would be desirable, as far as possible, to enlist the services of persons actually engaged in scientific trades and manufactures dependent on science.

The Advisory Council will proceed to frame a scheme or programme for their own guidance in recommending proposals for research and for the guidance of the Committee of Council in allocating such state funds as may be available. This scheme will naturally be designed to operate over some years in advance, and in framing it the Council must necessarily have due regard to the relative urgency of the problems requiring solution, the supply of trained researchers available for particular pieces of research and the material facilities in the form of laboratories and equipment which are available or can be provided for specific researches.

Office accommodation and staff will be provided for the Committee and Council by the Board of Education.

This is Great Britain's first step toward a general correlation of her industries with science, the necessity for which has been made overwhelmingly apparent by recent experiences.

In accordance with the tendency of the times the Commonwealth of Australia has initiated a similar movement, and an Advisory Committee appointed to formulate proposals to the Government in regard to the establishment of a "Commonwealth Bureau of Science and Industry" has already reported. [Nature 97, 38-40 (March 9th, 1916)].

"The proposals of the Committee are on lines somewhat similar to those of the British Government's scheme

for the organization and development of scientific and industrial research. Primary as well as secondary industries are included, and particular notice may be directed to the recommendations as to the governing body of the proposed institute, by which, as consistently advocated in our columns, the balance of power is placed in the hands of men of science."

The Committee, in formulating the following scheme, has been greatly impressed with the magnitude and the possibilities of the proposals made by the Prime Minister, and is strongly of opinion that the time has arrived for initiating the extensive scheme of scientific research work in connection with industry which he has outlined.

The Committee is convinced that the results of properly conducted investigations into many of the subjects referred to in his address will amply repay considerable expenditure and fully justify a bold and comprehensive policy being adopted. Not only will the results be a greatly increased productivity and output in many directions—in both primary and secondary industries—but the stimulus generally given to scientific research in relation to our industries will exert a powerful influence on our educational institutions and bring them and the industrial community to realize the commercial value of science more fully than hitherto. In fact, the initiation of the scheme will, in the opinion of the Committee, go far to inaugurate a new era in the economic and industrial life of the Commonwealth.

The proposals which follow will provide for the formation of a Commonwealth Institute of Science and Industry under the control of directors of the highest business and scientific attainment, acting with the advice and co-operation of a council representing science and the primary and secondary industries of Australia.

Recommendations.

(1) There should be established under Act of Parliament a Commonwealth Institute of Science and Industry.

(2) The functions of the institute should be:—

(i.) To consider and initiate scientific researches in connection with, or for, the promotion of primary or secondary industries in the Commonwealth.

(ii.) The collection of industrial scientific information and the formation of a bureau for its dissemination amongst those engaged in industry.

(iii.) The establishment of national laboratories.

(iv.) The general control and administration of such laboratories when established.

(v.) To promote the immediate utilization of existing institutions, whether federal or state, for the purposes of industrial scientific research.

(vi.) To make recommendations from time to time for the establishment or development of special institutions or departments of existing institutions for the scientific study of problems affecting particular industries and trades.

(vii.) The establishment and award of industrial research studentships and fellowships, to include either travelling fellowships or fellowships attached to particular institutions.

(viii.) To direct attention to any new industries which might be profitably established in the Commonwealth.