

The Register

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NATIONAL LABORATORY.

PROPOSED AUSTRALIAN INSTITUTION.

MELBOURNE, January 13.

At a conference of university and commercial experts convened by the Prime Minister (Mr. Hughes) about a fortnight ago to consider the proposal to establish a Commonwealth Bureau of Science and Industry, the formulation of a concrete scheme was entrusted to an advisory committee representing all interests affected by the proposal. This committee has met several times, and to-day it presented to Mr. Hughes its report and recommendations.

Commenting upon the report Mr. Hughes to-day stated that the Cabinet had approved of the recommendations relating to the proposed immediate action, and also intended to make the appointments to the Advisory Council without delay. With regard to the other recommendations in the report concerning the establishment of a permanent institute, Mr. Hughes said that as they were not of pressing importance they were to stand over until his return from England.

In their report the committee recommended—(1) There should be established under an Act of Parliament a Commonwealth Institute of Science and Industry; (2) The functions of the institute should be:—(a) To consider and initiate scientific researches in connection with or for the promotion of primary or secondary industries in the Commonwealth; (b) the collection of industrial, scientific information, and the formation of a bureau for its dissemination among those engaged in industry; (c) the establishment of national laboratories; (d) administration of such laboratories when established; (e) to promote the immediate utilization of existing institutions, whether Federal or State, for the purpose of industrial scientific research; (f) to make recommendations from time to time for the establishment or development of special institutions or departments of the existing institutions for the scientific study of problems affecting particular industries and trades; (g) the establishment and award of industrial research studentships and fellowships, to include either travelling fellowships or fellowships attached to particular institutions; (h) to draw attention to any new industries which might be profitably established in the Commonwealth; (i) to keep in close touch with, and seek the aid of, all Commonwealth and State Government Departments, learned and professional societies, and private enterprises concerned with, or interested in, scientific industrial research; (j) the co-ordination and direction of scientific investigation, and of research and experimental work with a view to the prevention of undesirable overlapping of effort; (k) to advise the several authorities regarding the steps which should be taken for increasing the supply of workers competent to undertake scientific research; (l) to recommend grants by the Commonwealth Government in aid of pure scientific research in existing institutions; (m) to seek from time to time the co-operation of the educational authorities and scientific societies in the States, with a view to advancing the teaching of science in schools, technical colleges, and universities, where its teaching is determined upon by those authorities; (n) to report annually and from time to time to Parliament.

Continuing, the report states:—“It cannot be too strongly insisted that the qualifications of a staff for ‘researching’ are different in character from those of a staff which is to carry out scientific routine testing.

With regard to the constitution of the institute, the committee passed the following motions:—1. That an advisory council, consisting of nine members, representing science and the principal primary and secondary industries, be appointed, who shall advise and co-operate with the directors in framing the policy and in the administration of the institute. 2. That the members be appointed by the Governor-General in Council. 3. That for the purpose of controlling and administering the institute and of collecting information and determining on the researches to be undertaken, and directing their elucidation, three highly qualified salaried directors, of whom one should be Chairman of the Directors, shall be appointed by the Governor-General in Council. The directors shall seek the advice and co-operation of the council and shall be ex-officio members thereof. That of the three directors, one should be

an expert business and financial man with ability in organization. The other two should be chosen mainly on account of scientific attainments and wide experience. 5. The tenure of the directors shall be fixed by the Act. 6. That the scientific staff should be appointed by the Governor-General in Council, on the recommendation of the directors.

The committee further resolved as follows:—1. That all discoveries, inventions, improvements, processes, and machines made by workers, directly employed by the institute, should be vested in trustees appointed by it as its sole property, and should be made available under proper conditions and on payment of gratuities or otherwise for public advantage. 2. That the council of the institute should be empowered to recommend to the Government the payment of bonuses to successful discoverers or inventors working under the auspices of the institute. 3. That the institute should be empowered to charge fees for special investigations, subject to regulations approved by the Governor-General-in-Council.

Although these matters are not directly connected with the proposed institute, the committee passed two further motions:—(a) That steps should be taken with a view to co-ordinate the work of our technical colleges and trade schools throughout Australia, so that a supply of scientifically-taught craftsmen will be available to support the expansion of industry that it is hoped will result from the operations of the Institute of Science and Industry; (b) that, with a view to promote our export trade in Australian products, it is desirable that serious attention be given to the study of modern languages, including Oriental languages, for commercial purposes.

The committee realizes that the establishment of the institute will necessarily involve some delay, but being impressed with the urgent need for work of the character proposed, the committee resolved as follows:—1. That until the institute is established an advisory council be appointed by the Governor-General-in-Council, particularly to carry out the objects expressed in the resolutions—(1) To consider and initiate scientific researches in connection with or for the promotion of primary or secondary industries in the Commonwealth; and (2) the collection of industrial scientific information and the formation of a bureau for its dissemination among those engaged in industry. 3. That the Federal and State munitions committees, heads of the Commonwealth and State scientific departments, and bodies representative of Commonwealth manufacture, commerce, agriculture, mining, and engineering, the universities, and technical colleges, and private enterprises, be invited to suggest branches of industrial scientific research, in which investigation would be of immediate practical use to producers and manufacturers. 4. That the advisory council be appointed forthwith, and that when appointed it immediately take steps to initiate research work into the most pressing matters needing investigation, and seek the co-operation of the existing institutions, and utilize the resources of the staff and equipment at our disposal at the present time. 5. The committee suggests for the consideration of the advisory council that the following problems, among others, are pressing:—The sheep-fly pest, improved methods of extracting zinc from Australian ores (including the commercial manufacture of electrolytic zinc), the utilization of brown coal, with the recovery of by-products, the introduction of a mechanical cotton picker, the eradication of the prickly pear, the production of aluminium and ferro alloys, the recovery of potash, manufacture of alkali, and the condensation of sulphurous acid as at present being wasted, the cultivation of useful indigenous grasses and salt-bushes, the manufacture of fine chemicals, drugs, and explosives. It is, of course, impossible to predict in matters of research what the outcome of the investigations may be, and the committee realizes that not all the above subjects can be examined to the point of final results. During the interval before the institute gets to work the committee, however, suggests that in many, if not all, of the above matters valuable work could be done in collecting data and, in effect, making a preliminary census, both regarding the present discoveries and the staff and apparatus available in Australia. Such work is an indispensable first step in all research. In addition to this there is ample scope for practical work during the interval in vigorously prosecuting the dissemination of known information concerning processes among our producers and manufacturers. 6. That funds be placed at the disposal of the advisory council for the above purposes.