

The Third Pan-Pacific Science Congress.

THE third Pan-Pacific Science Congress was held at Tokyo on Oct. 30–Nov. 11, 1926, under the auspices of the National Research Council of Japan and through the generosity of the Imperial Japanese Government. It must well have been one of the most remarkable scientific meetings ever held. The main objects of the Congress, like those of the first held in Honolulu in 1920, and of the second held in Australia in 1923, were (1) to initiate and promote co-operation in the study of scientific problems relating to the Pacific region, more especially those affecting the prosperity and well-being of the Pacific peoples; and (2) to promote a feeling of brotherhood and to strengthen the bonds of peace among Pacific peoples. It was laid down that all branches of physical and biological science formed proper subjects for discussion, provided that they bore upon some Pacific problem.

The Congress was attended by 150 delegates from countries outside Japan, and by 400 Japanese members. At the opening meeting, speeches of welcome were made by the Prince of Kan-in and by the Prime Minister of Japan. In addition to the general opening and final meetings, two joint meetings of all members of the Congress were held. At the first of these such papers were read as constituted a review of the present state of knowledge of the physical and biological oceanography of the Pacific, and at the second such papers as dealt with special plans for international co-operation. At five other sessions the different branches of science were grouped together so as to form two broad divisions, namely, the physical and the biological. At the remaining sessions simultaneous sectional meetings were held, there being sections for astronomy, meteorology and terrestrial magnetism, radio waves, geology, seismology, architecture, botany, zoology and fisheries, agriculture, geography, hygiene and medicine.

The object of the broad divisional meetings was an attempt to realise solidarity of feeling and action, and this attempt was eminently successful. At the meetings of the physical division the papers were grouped under the following headings: Meteorological and time-service by radio transmission and causes which give rise to its disturbance; form of the geoid as deduced from geodetic observations, measurements of gravity and plumb-line deviations; suitable projections for maps on different scales; crustal movements and geotectonics, earthquakes, crust-tides, and variation of mean sea-level; study of volcanoes in their various aspects; thermal springs; metallogenetic epochs and their bearing upon structural unity; distribution of rare elements.

At the meetings of the biological division the subjects were grouped under the following headings: Rational methods for the protection of useful aquatic animals and plants; genetics in relation to the improvement of important crops, more particularly

rice, and of live stock; distribution of bonitos and tunnis and their ecological studies; distribution and life-history of freshwater eels; international co-operation in the investigations of pelagic fish eggs and larvæ; preservation of natural monuments; rational methods of storing cereals; scientific bases for plant quarantine.

In all, more than 430 papers were presented and briefly described, printed abstracts being provided in advance. The full text of the papers, when published, will be of enormous value.

At the final general meeting many resolutions were passed on the recommendation of divisions, sections, and special committees, and, in particular, rules were drawn up for the constitution of a permanent Pacific Science Association, the function of which will be to organise future congresses. An invitation from the delegation of the Netherlands East Indies to hold the next congress in Java in 1929 was accepted.

Before and after the Congress long excursions were made, covering the land from Hokkaido to Kyushu, while two days in the middle of the Congress were devoted to shorter excursions. In all, there were about twenty excursions, and practically all overseas delegates were shown the beauties and wonders of Nikko, Hakone, Kyoto, and Nara.

Throughout the Congress itself and during the excursions, all overseas delegates and their families were the guests of the Japanese. The extent of the hospitality was only equalled by the perfect organisation, and both were the wonder of all visitors. The president of the Congress was Prof. J. Sakurai, the vice-president Prof. A. Tanakadate, and the general secretaries Profs. N. Yamasaki and K. Matsubara. In consideration of the great importance of these congresses, from both the national and international viewpoints, the Japanese Government, upon the recommendation of the National Research Council, had made a grant to be used for defraying the expenses.

Social functions formed a prominent part of the whole proceedings. Three garden parties were given by members of the Imperial family, and others by the Minister for Foreign Affairs and Baron and Baroness Fujita. Dinners were given by the Prime Minister, the president of the Congress, and the Mayors of Tokyo, Kyoto, and Osaka, while luncheons were given by the presidents of the Imperial Academy and of the Pan-Pacific Association of Japan. Theatrical performances of distinctive Japanese type were provided by Baron and Baroness Mitsui, and by the directors of the Imperial Theatre, while there were entertainments at each of the mayoral dinners. In addition there was much hospitality and entertainment of a more sectional and private character. No delegate from overseas will ever forget the cordiality of the welcome received from all types of Japanese citizens.

J. P.

Loutreuil Foundation of the Paris Academy of Sciences.

THE Paris Academy of Sciences received thirty-three applications for assistance under the Loutreuil Foundation, and has made the following grants:

(1) Establishments specially named by the founder. Muséum national d'histoire naturelle (15,000 francs), École nationale vétérinaire de Lyon (7000 francs), École nationale vétérinaire de Toulouse (7000 francs).

These three grants are for the same purpose, to permit these establishments to complete the sets of foreign periodicals in their libraries which have been interrupted during and since the War.

Institut national agronomique. 3000 francs to Jean Guérillot, for the purchase of apparatus for carrying out researches on the action of radio-activity in plant biology.

(2) Establishments admitted for a year by the president.

Conservatoire national des arts et métiers. 15,000 francs to Léon Guillet for the installation of a radio-spectrograph in the metallurgical laboratory. 2500 francs to Emilio Damour for the purchase of apparatus for the glass laboratory.

(3) Independent requests.

4000 francs to Charles Alluaud, as a contribution to a zoological expedition to Morocco.

6000 francs to Benjamin Baillaud, for the construction and installation, in the time signal department of the Paris Observatory, of a pendulum maintained by light rays and a photo-electric cell.

2500 francs to Jules Baillaud for carrying on experiments with the view of establishing a primary standard of light.

3000 francs to Henry Chabanier, for the purchase of apparatus for carrying out researches on nephritis, and particularly on the mechanism of œdema resulting from lesions of the kidneys.

3000 francs to Henri Chaumat for the construction of a new wattmeter with an arrangement permitting the determination of the angle of phase of a magnetic field and of the current producing it.

9000 francs to the Comité français de Géodésie et Géophysique (Section of Atmospheric and Telluric Electricity) as a contribution to the cost of the sixth expedition dealing with the new magnetic network of France.

3000 francs to Hippolyte Janvier for his biological studies in the Chilian Hymenoptera.

2000 francs to Paul Nottin for the continuation of his researches on the saccharification of starch.

5000 francs to Jean Mascart for assuring the publication of documents concerning the study of the variable stars, centralised at the Lyons Observatory.

2000 francs to Paul Pallary for his researches on the fauna of Morocco and the extension of the glacial régime in the Moyen-Atlas and the upper basin of Oumer Rebia.

10,000 francs to Pierre Teilhard de Chardin as a contribution to a new palæontological expedition in China.

9000 francs to Jean Thibaud for extending his researches on the structure of the atom and the radiations of radio-active substances.

4000 francs to Henri Deslandres for the publication by the Meudon Observatory of synoptic charts of the upper solar atmosphere and the details characteristic of this layer.

2000 francs to Joseph Guillaume to assist him to continue, in his private observatory, the observations which he had pursued for thirty-three years at the Lyons Observatory.

6000 francs to the Comité de patronage de la faune coloniale française, for starting this important work.

6000 francs to the Faculté française de médecine de Beyrouth for contributing to the publication of the "Flore de Syrie."

University and Educational Intelligence.

BIRMINGHAM.—The subject of the Huxley Lecture to be delivered by Prof. Elliot Smith on Feb. 1 is "Science and Culture," the realisation of Huxley's ideals. The lecture will be open to all members and friends of the university.

CAMBRIDGE.—Through the University Association, a sum of £1025 has been bequeathed by the late

Michael Emil Lange, of Christ's College, for the further endowment of the University.

EDINBURGH.—The International Education Board of New York has given a sum of £74,000 as a contribution to the cost of the new Department of Zoology and in recognition of the work of Prof. J. H. Ashworth, professor of zoology in the University. The new Department will be at the King's Buildings, West Mains Road.

LONDON.—The two following courses of free public lectures at University College are announced: "Reproduction," by Dr. A. S. Parkes (on Feb. 7, 14, 21, 28, Mar. 7 and 14), and "The Action of the Sense Organs," by Dr. E. D. Adrian (on Feb. 9, 16, and 23). The lecture hour in each case will be 5 o'clock.

OXFORD.—Mr. A. G. Tansley, lecturer in botany in the University of Cambridge, has been appointed to succeed Sir Frederick Keeble as Sherardian professor of botany at Oxford. Mr. Tansley was president of Section K (Botany) of the British Association at the Liverpool meeting in 1923, and is the author of a number of papers and other works on plant ecology.

FIVE fellowships tenable for two years, each of the annual value of £200, will be awarded in 1927 to graduates of the University of Wales. Applications for the fellowships must be received before June 1, by the Registrar, University Registry, Cathays Park, Cardiff, from whom further information may be obtained.

THE International Federation of University Women held its fourth conference at Amsterdam on July 28-Aug. 2, 1926. It has published a report (pp. 176, price 1s. 6d. post free, obtainable from the Secretary, 92 Victoria Street, London, S.W.1) containing much interesting information bearing on the various subjects discussed: international fellowships for research and travel, interchange of secondary school teachers, the problem of a language of international intercourse, the means of reconciling marriage with a professional career, and several others. The accounts given by ten distinguished members of the Dutch Federation of the work of university women in Holland and its colonies are of outstanding importance, indicating as they do, with considerable fullness, the place of university women in the national economy. Prominent among the sciences in which women have shown capacity for advanced work is biology. Of 245 women in Holland who have completed university studies in this branch of science, 45 are married and have no professional occupation, 129 are teaching, chiefly in secondary schools, and 41 are scientific workers in universities, including 21 in agricultural stations and 11 in museums, etc. Of 216 who have completed a medical course, 183 are practising doctors. Nearly half of them are married (59 to medical men) and 56 of these have full-time practices; 35 medical practitioners work in the Dutch East Indies, 19 holding government appointments. In pharmacy, women assistants (1698) largely outnumber the men (308), although there are only 217 fully qualified female pharmacists to 643 male. In dentistry there are 576 men to 132 women. In the Dutch colonies there are women physicians (35), dentists (22), chemists (10), biologists (9), doctors-in-law (9), teachers (16), and one theologian.