

Association of Technical Institutions.

IN the unavoidable absence of the president for 1928 (Sir Alfred Mond), Lord Riddell gave an address at the opening session of the annual general meeting of the Association of Technical Institutions, held at Stationers' Hall, London, on Feb. 24 and 25. Since he had been president of the Association during 1927, Lord Riddell was able to give some of the impressions of technical education he had gathered from his examination of its problems. He commented on the great work and scholarship of the staffs of the institutions: he noted the widespread recognition which is now being accorded to the liberal quality of technical education: he stressed the necessity of developing day classes. At present, he said, there are about 850,000 pupils in technical institutions; of these 750,000 attend evening classes. Yet when one considers the numbers of young persons in England and Wales between the ages of fourteen and twenty-five, it is obvious that 100,000 day pupils does not represent the maximum of day work which ought to be possible. Finally, Lord Riddell presented a vigorous defence of modern young people against what are practically perennial charges of slackness and deterioration. This defence, Lord Riddell said, was necessary and opportune, since Sir John Reith, of the British Broadcasting Corporation, had recently implied such charges. He had, however, asked Sir John to come and address the meeting.

Sir John Reith's short address was not only devoted to the points referred to by Lord Riddell. As an engineer, he criticised the present training of engineers, and made a plea that greater cultural qualities should be given in that training. It would appear, however, that Sir John's views concerning the cultural qualities he urges are not a little confused. To illustrate the engineer's lack of them he related a story. With a friend he ascended a steep road. When they reached the top a marvellous panorama of the countryside was unfolded to their view. Deeply moved by its

beauty, Sir John turned to note the effect of it all upon his companion. The latter, however, appeared to ignore it. "Listen to that traction engine coming up the road," he said; "it is knocking abominably!" It may have been a disappointing remark, but it was not evidence that appreciation of beauty was lacking. There are obscenities of sound as well as of sight: John Masefield's "dirty British coaster with a salt-caked smoke-stack, butting through the Channel in the mad March days" may be different from the "stately Spanish galleon dipping through the tropics," but it possesses its own qualities of beauty.

Col. Ivor Curtis's paper on education in the Royal Air Force was the very interesting story of an educational experiment: an experiment which had to be made for a branch of the Service which was without tradition. A central problem was to overcome the scepticism of the Service and to make it a working partner. The experiment has succeeded. The nature of the Royal Air Force makes it essential that all work should lead to the development of individual resource. In connexion with the actual scheme as it now exists (one-third of the Royal Air Force is obtained through the apprenticeship scheme and two-thirds from men recruited after the age of eighteen), the success of libraries at scattered centres has been particularly marked.

In view of the present tendency to investigate the qualifications and examinations of builders and architects, papers on the training of the architect and on technical education for the building trades by Messrs. T. P. Bennett and F. E. Drury respectively were greatly appreciated.

The report of the Council for the year contained an excellent record of work done in connexion with the University of London Bill, Matriculation (University of London), libraries in technical institutions, Architects' Registration Bill, the Emmott and Malcolm committees on education and industry, and examinations for part-time students.

The Indian Science Congress.

THE fifteenth session of the Indian Science Congress was held in Calcutta on Jan. 2, 1928. In the absence through illness of His Excellency the Viceroy, who had intended to preside at the inaugural meeting in the Senate House of the University on Jan. 2, the proceedings were opened by His Excellency Sir Stanley Jackson, the Governor of Bengal. This is the third time the Congress has been held in the second city of the Empire, the first occasion being in 1914, when the first meeting was held, the second in 1921. To commemorate the fact that Calcutta was the birthplace of the Congress, and to bring out the rapid growth of this movement, the original *Proceedings* of the 1914 meeting were reprinted and distributed to the members. In fourteen years the space taken in recording these proceedings has increased seventeen-fold.

It was fitting that Dr. J. L. Simonsen, one of the two originators of this movement and the man to whose self-sacrificing labours as honorary secretary the Science Congress owes its origin and steady growth, should have been elected president for this meeting. The difficulties in starting an organisation which required the co-operation of so many autonomous bodies, such as the universities, a number of research institutes, as well as the many independent Government departments which deal with applied science in a continent the size of India, were considerable. The task of steering an unofficial move-

ment past the many difficulties which were encountered during the early years was still greater. For this piece of public service India owes a great debt to Dr. Simonsen. The Congress is now firmly established and fulfils a very useful function in providing an annual meeting ground for men of science in India and in breaking down the barriers imposed by distance, by race, and by that condition which, for want of a better word, may be described as departmentalism.

In his presidential address, Dr. Simonsen first gave a short history of the origin and progress of the Congress, and directed attention to the services rendered thereto by a number of distinguished men of science, among whom Sir Sidney Burrard and the late Sir Henry Hayden took a prominent place. The Asiatic Society of Bengal from the beginning also did much to foster the movement. Dr. Simonsen then dealt with the growth of the research spirit in the Indian universities, and passed on to the present academic standing of these bodies. While the former is in a satisfactory condition and shows definite signs of progress, the general academic standing of the universities of India is being steadily lowered. This latter manifestation was attributed partly to the fact that the control of these universities is now largely in the hands of laymen, and partly to the circumstance that a university degree in India is regarded as a stepping-stone to Government

employ. Two reforms were advocated to meet the situation—the control of the curriculum and of the examinations should be placed in the hands of the professional staff; admission to the various Government departments should be based on Civil Service examinations conducted by an impartial authority. The last portion of the presidential address dealt with the importance of the study of natural products (see NATURE, Feb. 11, p. 216).

Much useful work was accomplished in the various sectional meetings. Among the most successful was that of the Section of Mathematics and Physics, where as many as eighty-one papers were presented. In his address, Dr. J. de Graaf Hunter gave a sketch of the results of studies of the figure of the earth from the earliest times. A spheroid has been used latterly as a reference figure and the geoid has been exhibited in relation to it. By this means determinations of the spheroids which best fit the geoid in India and the United States have been made on the basis of isostasy and without. In the case of India, isostasy does not account for the geoidal anomalies, and large areas appear to have density anomalies larger than has recently been considered probable. The study of the geoid, combined with pendulum results, promises to yield further information about these crustal anomalies and may possess an industrial value.

The Section of Chemistry as usual attracted many members, and one hundred and forty-four papers were contributed. In his sectional address, Prof. S. S. Bhatnagar, of the University of Lahore, dealt with the progress of physico-chemical research in India and gave an interesting review of the past history and present position of this branch of science.

Another address which attracted a good deal of notice in the local press was that given by Dr. Michael P. West in the Section of Psychology. Two diametrically opposed types of educational psychology were contrasted, one emphasising the type, the other individual growth. Stress was laid on the need of a new type of institution which would give the child the means and opportunities for developing its own peculiar interests.

In the Section of Botany, Prof. M. O. Parthasarathy Iyengar gave an interesting review of various aspects of the study of algæ and emphasised the need for a handbook of Indian algæ as a means of stimulating research. This section, which was well attended and in which the discussions often reached a high level, reflected the great attention which has been given to botany in recent years by the Indian universities and the vastly improved teaching in this subject.

The other sections represented in the Congress were Agriculture, Anthropology, Zoology, and Geology. Owing to the recent session in Calcutta of the Far Eastern Association of Tropical Medicine, the Medical Section of the Indian Science Congress did not meet in 1928.

Three evening lectures, all of which were well attended, were given in the Senate House of the University: on radiations and their uses, by Prof. G. R. Paranjape; on applications of chemistry in modern warfare, by Prof. J. C. Ghosh; and on inheritance in plants and animals, by Prof. M. A. Sampathkumaran.

A very full programme of excursions was arranged by the local secretaries, and much hospitality was shown both by individuals and by public bodies. The University of Calcutta placed the Senate House and the other University buildings at the disposal of the Congress. Visits were arranged to the various research centres in Calcutta, such as the School of Tropical Medicine, the Bose Institute, and the Indian Museum.

University and Educational Intelligence.

BIRMINGHAM.—At the annual meeting of the Court of Governors, held on Founder's Day, it was announced that Mr. and the Hon. Mrs. Anstruther-Gough-Calthorpe had most generously made to the University a free gift of 40 acres of land adjoining the site of the University buildings at Edgbaston. It is hoped that this gift will allow of the provision of more playing fields in the near future and will give ample room for extension of the University for many years to come. It may be recalled that the site of the present buildings was also a gift of the Calthorpe family.

CAMBRIDGE.—Dr. N. J. T. M. Needham, Gonville and Caius College, has been appointed University demonstrator in biochemistry.

Sir J. J. Thomson gave the First Founder's Memorial Lecture at Girton College on Mar. 3 on the subject "Beyond the Electron."

LONDON.—Mr. Bernard Ashmole, who, since 1925 has been Director of the British School at Rome, has been appointed as from Aug. 1 to the Yates chair of archaeology tenable at University College.

Prof. Robert Robinson has been appointed as from Aug. 1 to the University chair of organic chemistry tenable at University College. Prof. Robinson studied at the University of Manchester, where he obtained the D.Sc. degree in 1910. He has occupied professorial chairs at Sydney, Liverpool, St. Andrews, as well as at Manchester, and has had considerable experience in industrial chemistry with the British Dyestuffs Corporation. He is the author of numerous papers mainly on the constitution of the colouring matters, brazilin and hæmatoxylin, on the isoquinoline alkaloids, and on the alkaloids gnoscopine, harmine, and strychnine.

MANCHESTER.—Honorary degrees to be conferred on Founder's Day, May 23, include the following—LL.D.: Right Hon. Sir Alfred Mond, Bart.; D.Sc.: Prof. David Hilbert, professor of mathematics in the University of Göttingen, and Prof. C. T. R. Wilson, Jacksonian professor of natural philosophy, Cambridge. It is expected that Dr. Richard Willstätter, who was unable to be present last year, will receive the honorary degree of D.Sc. at the same ceremony.

NEWCASTLE-ON-TYNE.—At a meeting of Armstrong College Council held on Mar. 5, the resignation, as from Sept. 30, of Prof. J. J. Welch, professor of naval architecture since 1907, was accepted with regret.

The following new appointments were made as from Oct. 1: (1) Prof. T. H. Havelock, at present professor of applied mathematics in the College, to be professor of mathematics and director of the Department; (2) Dr. G. R. Goldsbrough, since 1919 lecturer in applied mathematics and reader in dynamical astronomy, to be professor of mathematics. Prof. Havelock, who is a graduate in science of the University of Durham and was for a time fellow of St. John's College, Cambridge, was appointed to the College as lecturer in applied mathematics in 1906, and promoted to the professorship in 1914. Since that date the Department of Mathematics (under Prof. Jessop) and the Department of Applied Mathematics (under Prof. Havelock) have been separate. Prof. Jessop having now reached the retiring age, the two departments will be combined and Prof. Havelock will take charge.

OXFORD.—Prof. David M. Watson, Jodrell professor of zoology and comparative anatomy in University College, London, has consented to deliver the Romanes Lecture for 1928 in Oxford on May 4 at 5 P.M. The subject chosen is "Palæontology and the Origin of Man."