

to complete their studies. Not more than 10 per cent of the places available may be filled by those of age 18-19 recommended for deferment by joint recruiting boards, and other suitable students of that age-group. Medical, dental and veterinary students will in future be dealt with in the same way as other students. Women's colleges are being asked to give preference to those who have been on war service. It is hoped that universities generally will not accept boys younger than eighteen. Mr. Isaacs added that these proposals have been accepted by the vice-chancellors of the universities.

For many months past, this announcement has been anxiously awaited by those responsible for university development in Britain. Since Mr. Isaacs stated that the vice-chancellors of the universities generally approve the scheme, it would seem that university needs have, in the main, been met. It is clearly right that those whose courses have been interrupted, and those who would have entered the universities had the War not intervened and diverted them to some form of national service, should have preference in the competition for places. But without studying the data on the possible number of entries, it is not possible to assess the wisdom of fixing on the figure of 10 per cent for the maximum number of places available for schools. It is probably all to the good, however, that the entry of youths of less than eighteen should be discouraged; they will thus be able to enter the universities at a more mature age and with a period of service intervening between their school and university studies. The proposal to open up all subjects again will be widely welcomed; there has been a serious break in the output of students of the humanities which is likely to show its effect in the teaching profession for some years to come, and indirectly it has militated against that broad cultural education which should characterize university training.

Series of Polynomials

IN many problems of pure and applied mathematics it is required to express a given function in terms of certain polynomials, such as those associated with the names of Legendre and Hermite. The general theory of all polynomials that can be used in this way engaged the attention of several mathematicians, including Prof. J. M. Whittaker of Liverpool. In the dark days of 1942-43 Major Whittaker, as he was then, found himself stationed in the vicinity of the University of Cairo. Stimulated by contact with the active mathematicians of that University, he started to deliver a course of lectures on the subject of his peace-time research. The course was cut short when he was transferred to another theatre of war. The lectures delivered were edited by Prof. Mursi, of the Fouad I University, Cairo, and published in pamphlet form by the Faculty of Science of that University. They deal with simple and other basic series, Cannon series, series effective on a circle, representation near a point, algebraic theory (using matrices), uniqueness, convergence, integral functions, and successive derivatives.

Resistance Welders and the Electricity Supply Industry

IN a recently published paper on this subject (*J. Inst. Elec. Eng.*, 92, Part 2, No. 30; Dec. 1945) the author, R. B. Giles, is primarily concerned with the effect of the a.c. resistance welder upon the networks

of public supply authorities and the problem of securing an equitable revenue for the service rendered to the user. To that end, the electrical characteristics of the welding machine are detailed, together with some particulars of experience and consumption of energy in the metal trades, both of Great Britain and of the United States. There is a brief reference to the D.C. capacitance-storage welder, which is of comparatively recent development, and some details of the energy used by this type of machine are given. Proposals are made for a standard specification for the use of welder manufacturers and for the more satisfactory guidance of the supply authority and the user. The possibilities of a special tariff for welder consumers are also discussed.

Society for Endocrinology

CONTRIBUTORS to the *Journal of Endocrinology* have recently taken the initiative in the formation of a Society for Endocrinology, the object of which is to promote the advance of endocrinology by observational, experimental and clinical studies. The Society was founded at an inaugural meeting held at Guy's Hospital, London, on April 26, when the following elections were made: *Hon. Secretary*, Dr. S. J. Folley; *Hon. Treasurer*, Dr. C. W. Emmens; *Hon. Editor of the Society's Proceedings*, Prof. S. Zuckerman; *Members of Committee*, Dr. P. M. F. Bishop, Dr. A. S. Parkes, Mr. P. C. Williams, Prof. F. G. Young. In addition to ordinary meetings at which original scientific communications will be presented, the Society hopes to organise from time to time symposia on selected topics in the field of endocrinology. The address of the Hon. Secretary is: c/o The National Institute for Research in Dairy-
ing, Shinfield, near Reading.

Society for the Study of Evolution

A Society for the Study of Evolution was formed on March 30, 1946, on the occasion of the meeting of the American Association for the Advancement of Science at St. Louis. The object of the Society is the promotion of the study of organic evolution and the integration of the various fields of biology, such as taxonomy, palæontology, genetics, that are interested in evolution. The elected officers are: *President*: Dr. George G. Simpson; *Vice-Presidents*: Prof. Ernest B. Babcock, Prof. A. E. Emerson, and Prof. J. T. Patterson; *Secretary*: Dr. Ernst Mayr; *Treasurer*: Mr. K. P. Schmidt; *Council*: Prof. R. Chaney, Prof. Th. Dobzhansky, Prof. E. R. Dunn, Prof. G. Jepsen, Prof. H. J. Muller, and Prof. Sewall Wright. Communications should be addressed to the secretary, Dr. Ernst Mayr, American Museum of Natural History, Central Park West at 79th Street, New York 24, New York.

Society of Glass Technology

ACCORDING to the report for 1945 of the Council of the Society of Glass Technology, presented at the annual general meeting held at Sheffield on April 25, there are now an Indian Section and five local sections, in addition to the parent body. The total membership exceeds one thousand, distributed through thirty-five countries. Prof. H. Moore retired from the presidency, after holding office for two years, and was succeeded by Mr. Geoffrey I. C. Marchand, director of the Glass Manufacturers' Federation. Prof. W. E. S. Turner, honorary general secretary, will retire on May 31, and Dr. J. H. Partridge, of the Research Laboratories

of the General Electric Co., Ltd., Wembley, will succeed him. Mr. F. G. Orme, general treasurer, will be succeeded by Mr. A. E. Hill. Prof. Turner, founder of the Society, who has exercised a profound influence on its development for a period of thirty years, will continue to act as editor of its journal.

Summer School in X-ray Crystallography 1946

By the courtesy of Prof. C. E. Tilley and of Sir Lawrence Bragg, a Summer School in X-ray Crystallography will be held for the fourth consecutive year in the Department of Mineralogy and Petrology, and in the Cavendish Laboratory, Cambridge. The School is conceived as a means of providing an introduction to the fundamental theory, methods, and techniques of X-ray diffraction, so that those whose researches, whether in the universities or in industry, lie in the field of physics, chemistry, metallurgy, mineralogy, or biology may be able to recognize in their own work the types of problem to which these methods may with advantage be applied. The greater part of the course will be devoted to practical work on the interpretation of the various types of X-ray photograph. For the last two days, however, alternative lectures and demonstrations will be offered in A and B sections. The A section will include further steps, theoretical and practical, in the study of crystal structures, while in the B section some applications of the earlier work of the course to metallurgical problems will be studied. The School will be held from Monday, September 2 to Friday, September 13 inclusive. A detailed syllabus and form of application for admission can be obtained from Mr. G. F. Hickson, Secretary of the Board of Extra-Mural Studies, Stuart House, Cambridge, to whom the completed application form should be returned not later than July 1.

Exhibition of Chemical Research

AN exhibition of chemical research, organised by Imperial Chemical Industries, Ltd., is to be held at the Tea Centre, Lower Regent Street, London, S.W.1, during June 5-28. The exhibition is designed to show some of the major achievements of chemical research in Britain during the War, and to demonstrate their even greater importance in peace-time. The section "The Chemist versus Disease" will show the part played by chemical research in combating disease and improving sanitation, conditions of a century ago being contrasted with those of to-day. Particular emphasis is laid on the sulpha drugs, penicillin and 'Paludrine', and their significance in chemotherapy is explained. "The Chemist and Your Food" will outline the part played by the chemical industry in modern agriculture. Though synthetic fertilizers will be shown, this section will be mainly concerned with the evolution of chemical methods for combating moulds, bacteria and weeds. The discovery, development and use of the new selective weed-killer, 'Methoxone', will be illustrated with models, diagrams and photographs. Chemical warfare against predatory and disease-bearing insects will have a section to itself. The insecticide 'Gammexane' will be illustrated by specimens and molecular models of the four isomers of benzene hexachloride. The section on "The Chemist and Plastics" will centre around 'Perspex' and polythene. The history of 'Perspex' will be demonstrated, and a molecular model will illustrate the polymerization of methyl methacrylate. The technical interest of polythene lies in the fact that

its production, by the polymerization of ethylene, involves pressures higher than those used, in any other industrial processes. Polythene is also unique in being the simplest synthetic thermoplastic, composed of long methylene chains of 1,000 units or more. Exhibits will show its electrical properties, its use as a waterproof packing material for drugs, and for acid-proof containers, funnels and piping. The final section will be devoted to 'Ardil', the wool-like protein fibre made from ground nuts. Diagrams and models will demonstrate the breakdown of proteins into amino-acids, and the reassembly of these into proteins of a different nature. The process of the manufacture of 'Ardil' will be demonstrated, and fabrics will be shown in which it is combined with wool, cotton and rayon. The exhibition will be open daily from 10.30 a.m. to 8 p.m. (Sundays from 2 until 7 p.m.). A charge of 1s. will be made for admission, and all proceeds will be given to the Empire Fund for Cancer Research.

Announcements

THE British Social Hygiene Council is organising a two-day conference to be held in Livingstone Hall on June 6 and 7. The aim of the conference is to provide a platform in which men of science and religion can meet in a common search for truth. Among the speakers will be: Sir Ernest Barker, Dr. K. E. Barlow, Mr. R. F. Harrod, Miss E. C. Knight Bruce, Rev. P. J. Lamb, Father J. Leycester King, the Dean of St. Paul's, Lord Moran, Dr. Basil Yeaxlee, Prof. A. V. Hill. Further information and tickets (price 10s.) may be obtained from the British Social Hygiene Council, Tavistock House North, Tavistock Square, London, W.C.1.

A CONFERENCE on "Certain Aspects of the Action of Radiation on Living Cells", arranged by the British Institute of Radiology, will be held at the Reid-Knox Hall, 32 Welbeck Street, London, W.1, during May 13-14. The four sessions will cover the physics of irradiation and effects on viruses, action on aqueous solutions, action on chromosomes and effects on germ cells with special reference to man.

THE Illuminating Engineering Society is holding a convention during May 14-16. Meetings will be held at the Institution of Electrical Engineers for the presentation of papers on lighting during the War, problems of visibility, lighting of airports, daylight in relation to town planning, and fluorescent lighting practice. An exhibition of war-time applications of lighting and of post-war developments is being arranged at the Lighting Service Bureau, 2 Savoy Hill, Victoria Embankment, London, W.C.2, during May 14-16.

THE trustees of the Busk Studentship in Aeronautics hope to make an appointment during June next. The Studentship is of the value of about £165, tenable for one year from October 1, and is open to a British subject of British descent who has not attained the age of twenty-five years on October 1. The object of the Studentship is to enable the holder to engage in research, or preparation for research, in aeronautics of the kind in which Edward Busk was specially interested; namely, those involving experimental as well as mathematical investigation. Application forms, to be returned by June 1, can be obtained from Sir Melvill Jones, Engineering Laboratory, Cambridge.