# Applied Biology in the National Research Laboratories, Ottawa

THE Division of Applied Biology, National Research Laboratories, Ottawa, has now been in operation for twenty years and has already issued some five hundred publications. Its chief concern is research into the use of agricultural products as food or as industrial raw materials, problems connected with the productive or medical aspects of the subject being left to other organisations. The investigations undertaken cover a wide field and include those of a long-term fundamental nature as well as those for immediate industrial application. The results of the Division's activities are now being published as quarterly reports, the first of which was issued for the period January-March 1949. Each report will include a detailed account of some aspect of the work which has reached a reasonable state of completion, and will describe the chief features of the work in progress in the various fields of inquiry. such as food preservation, industrial utilization of agricultural crops and wastes, fats and oils, seaweed products and the application of statistics.

## Infra-Red Heating Jackets

A NEW type of flexible heating jacket with a very wide range of uses, the 'Stabilag' infra-red heating jacket, has been marketed by Electricals, Ltd., Newcastle upon Tyne, 2. The jackets are moulded to fit any shape or size of apparatus and consist of a closely pitched heating element stitched to a fabric of woven glass in such a way that the heat is distributed evenly over the entire surface. They are normally supplied with an aluminium outer cover, although steel, stainless steel or copper can be supplied if desired, and are available for laboratory or industrial purposes. They provide a completely safe form of heating for inflammable liquids and can be used in conjunction with various types of control gear to give controlled heating to within 0.1° C. up to 500° C.

# Guide to the Science Museum, London

ONE of the last administrative acts of the late Dr. H. Shaw, director of the Science Museum, South Kensington, London, S.W.7, was to publish an admirable outline guide to the exhibits (pp. 36+6 plates; London: H.M. Stationery Office, 1950; 6d. net). The booklet gives just that information which the average visitor requires, and is not overburdened with facts. A sketch map indicating the environs of the Museum and a plan of the galleries, together with a comprehensive index, quickly enables the visitor to discover the objects he seeks, or enables the individual with no particular object in mind to make an intelligent tour of the building. The objects for illustration have been selected with care, and the production is worthy of one of the foremost national museums in Great Britain.

#### Congress of Animal Technicians

A congress of animal technicians, organised by the Laboratory Animals Bureau, took place at the Royal Veterinary College, London, during March 30–31. More than four hundred technicians from all parts of Great Britain attended on one or both days. On March 30, at the congress, the Animal Technicians Association was formed under the presidency of Dr. A. S. Parkes; the honorary secretary is Mr. A. E. Mundy, Research Institute, Royal Veterinary College, Royal College Street, London, N.W.1, from whom

details of the new Association can be obtained. On March 31 three scientific and technical papers were presented: "Management of Small Animal Colonies to produce Large Numbers of Litter Mates for Controlled Experiments", by Mr. G. Porter, chief technician, Rowett Research Institute, Bucksburn; "The Effect of Controlled Artificial Illumination on Rat Breeding", by Mr. R. A. Hall, chief technician, Allen and Hanburys, Ware; and "Infection in Laboratory Animals", by Dr. H. J. Parish, clinical research director, Wellcome Research Laboratories, Beckenham. On both days a programme of scientific films was presented. There was also a trade exhibition at which were represented more than thirty firms engaged in the manufacture of animal house equipment, materials, appliances and accessories. details of the proceedings of the congress will be published in the Journal of the Animal Technicians Association. The Laboratory Animals Bureau will be organising a similar congress in 1951 at a provincial centre.

## International Congress of Mathematicians

An International Congress of Mathematicians will be held at Harvard University, Cambridge, Massachusetts, during August 30-September 6, under the auspices of the American Mathematical Society. This Congress was originally intended for 1940, but was postponed owing to the War; consequently it will be the first international gathering of mathematicians to be held since the Congress in Oslo in 1936. The usual joint meeting of the American Mathematical Society, the Mathematical Association of America, and the Institute of Mathematical Statistics will be cancelled this year in favour of the Congress. programme of the Congress is arranged primarily on the basis of conferences in four different fields, at which there will be both formal lectures and informal open discussion; the four conferences and the subjects to be considered are: algebra—groups and universal algebra, structure theory of rings and algebras, arithmetic algebra and algebraic geometry; analysis-algebraic tendencies in analysis, analysis and geometry in the large and extremal methods and geometric theory of functions of a complex variable; applied mathematics-partial differential equations, statistical mechanics and random processes in physics and communication; and topology-homology and homotopy theory, fibre bundles and obstructions, differentiable manifolds, and topological groups. In addition, there are seven sections of the Congress at which short papers may be contributed and at which a small number of half-hour addresses will be given (by invitation); these sections are: (1) algebra and theory of numbers; (2) analysis; (3) geometry and topology; (4) probability and statistics, actuarial science, economics; (5) mathematical physics and applied mathematics; (6) logic and philosophy; and (7) history and education. The official languages of the Congress are English, French, German, Italian and Russian. All communications should be addressed to the International Congress of Mathematicians, Low Memorial Library, 531 West 116th Street, New York City 27.

# Nuclear Physics Conference in Great Britain

THE Atomic Energy Research Establishment at Harwell is organising a nuclear physics conference to be held at Harwell and Oxford during September 7-13. The proceedings will be divided into two parts: the first concerned primarily with the use of high-energy

particle accelerators, for nuclear physics experiments; and the second with lower-energy nuclear physics, including the use of atomic piles for experimental work. The number of delegates at the conference will be limited by the capacity of the lecture theatres to about two hundred, and attendance will be by invitation only. Delegates are expected from British universities, and from the British Commonwealth, the United States and Western Europe. The programme will be as follows: September 7–8, high-energy accelerators, experimental and theoretical high-energy physics and  $\beta$ -ray spectroscopy; September 9, a visit to Harwell; September 11–12, nuclear physics; and September 13, pile physics and neutron spectroscopy.

## Beit Memorial Fellowships for Medical Research

BEIT MEMORIAL fellowships for medical research have been awarded to the following for work in particular fields at the places shown. Fourth-year fellowship (£700 a year): Dr. G. Weber (dissociation of insulin), School of Biochemistry, University of Cambridge. Junior fellowships (£600 a year): J. Crossland (nature and functions of humoral factors in nervous transmission in the brain), Neuropsychiatric Research Centre, Whitchurch Hospital, Cardiff; Joan E. Keilin (link between the hæm and protein in hæmoglobin), School of Biochemistry, Cambridge; R. J. Salton (chemical and immunological nature of the outer envelopes of bacterial cells), Department of Colloid Science, Cambridge.

### **Announcements**

The Kamerlingh Onnes Gold Medal awarded by the Nederlandse Vereniging voor Koeltechniek (Netherlands Society for Refrigeration) has been conferred upon Prof. F. E. Simon, professor of thermodynamics in the University of Oxford, in recognition of his contributions to refrigeration techniques at very low temperatures. The presentation ceremony will take place in Leyden on September 21, the anniversary of the birth of the late Prof. H. Kamerlingh Onnes.

The joint committee of the Royal Physical Society, the Royal Scottish Geographical Society, and the Royal Society of Edinburgh has awarded the Dr. W. S. Bruce Memorial Prize (1950) to Dr. M. J. Dunbar, associate professor at McGill University, Montreal, for his biological researches in the Canadian Arctic.

THE Summer Meeting of the Industrial Radiology Group of the Institute of Physics will be held at the New Horticultural Hall, Victoria, London, during July 25-28. Admission to the lectures and Group Summer Exhibition (and to the Technical Exhibition of the International Congress of Radiology) will be by ticket only, obtainable free from the Institute of Physics, 47 Belgrave Square, London, S.W.1.

The Manchester and District Branch of the Institute of Physics and the British Rheologists Club will hold a joint conference on the physics of lubrication at the University of Manchester during June 29—July 1. Further particulars may be obtained from the conference secretary, Mr. D. A. Crooks, Imperial Chemical Industries, Ltd., Dyestuffs Division, Hexagon House, Manchester 9.

THE Midland Branch of the Institute of Physics is holding a conference on vacuum physics at the Physics Department, University of Birmingham,

during June 27–28. The conference will provide an opportunity for the lecturers, all of whom are closely associated with developments in vacuum physics, to describe the most recent improvements in technique and equipment. A public exhibition will be staged in conjunction with the conference at which it has been arranged for leading manufacturers of vacuum equipment to exhibit a wide range of pumps, gauges and associated equipment. Membership of the conference is open to all who are interested in this field, and further details may be obtained from the Deputy Secretary, Institute of Physics, 47 Belgrave Square, London, S.W.7.

THE National Aeronautical Collection in the Science Museum, London, S.W.7, will be re-opened to the public on June 24. The Collection is in the Western Galleries of the Museum. It contains many famous and historic aircraft, and it illustrates the history and development of aeronautics from the earliest conception of flight to the latest rocket-propelled aircraft.

The Harvard School of Business Administration and the British Institute of Management are jointly offering two scholarships for men of British nationality to study business methods and administration at Harvard for two years. One scholarship is being financed by Harvard and the other from funds contributed by British industry. The awards are worth 2,400 dollars (£860) a year and are open to those who are, or intend to pursue careers, in industry, commerce, labour organisations or the public services. Application forms (to be returned by June 30) can be obtained from the Head of the Educational Development Department, British Institute of Management, Management House, 8 Hill Street, London, W.1.

The eighth annual meeting of the Electron Microscope Society of America will be held at the Hotel Statler, Detroit, Michigan, during September 14–16. The programme chairman is F. A. Hamm, of the Central Research Laboratory, General Aniline and Film Corporation, Easton, Pa.

Ar the Third Congress of the International Scientific Film Association, held in Brussels during September 30-October 5, 1949, a Medical Standing Committee was set up, the chief function of which is the collection of data about existing films on human parasitology, and also the exploration of the needs of film-production in this field and the possibility of setting up a collection of such films. Medical practitioners and experts on human parasitology who are able to give some information on existing films on human parasitology (title, size, subject, country of origin and maker) are asked to write to Dr. Willem de Vogel, Netherlands University Institute for the Production of Scientific Films, 59 Catharijnesingel, Utrecht.

The University of London awards a certificate of proficiency in natural history, which is designed for teachers who require a certificate testifying that they have a practical working knowledge of the subject for children up to the age of fifteen years. The work involves a directed course of private reading at home, attendance at a four-week practical course, fieldwork (to be written up in an essay), and written and oral examinations. Further information may be obtained (before November 30) from the Director of the Department of Extra-Mural Studies, University of London, Senate House, London, W.C.1.