

THE BRITISH INSTRUMENT INDUSTRIES' EXHIBITION

THE second exhibition of the British Instrument Industries was held during June 30–July 11 in the National Hall, Olympia, London, two years after the first. It is the intention of the sponsors—five trade associations concerned wholly or partly with instrument manufacture—and organizers to make the exhibition a biennial event.

The confidence in the value of the exhibition shown by these plans seems to be justified: the second exhibition had more exhibitors than the first; the exhibitors, numbering 168, represented adequately the British instrument industries and included most of the large firms and many of the smaller ones; and the products displayed (of 414 kinds, according to a count of the subject headings of the classified index in the catalogue) were representative of the scientific and industrial instruments made in Great Britain. The hall, which was well set out, appeared to be comfortably filled and the exhibitors busy.

The instruments on show, too numerous to be described individually, revealed one general and well-recognized trend and several local and less obvious ones. The general one is, of course, the increasing extent to which almost every type of modern instrument incorporates, and is dependent upon, electrical or electronic components or accessories, which are therefore expected to be almost as reliable and trouble-free as the cases and stands themselves.

Apart from this general trend, some small but probably significant changes are discernible. Thus there appears to be an increasing number of instruments made for non-destructive testing, and particularly for thickness gauging, with special emphasis on the measurement of the thickness of electro-deposits and coats of paint. The application of radioactivity is becoming more common and new uses are being found: one exhibit was an ionization anemometer, where the rate at which air ionized by a radioactive source is blown away provides a measure of wind velocity. Strain gauges are becoming ubiquitous research tools, and are taking on new forms, incorporated, for example, in compact, hermetically sealed load cells.

Some of the exhibits provided encouraging evidence that there is not always as long a delay in developing commercial models of instruments from the products of the research laboratories as is often supposed. The flying-spot microscope, the possibilities of which were pointed out by Roberts and Young as recently as 1951 (*Nature*, 167, 231; 1951), was on show (not for the first time) and was no longer regarded by visitors as a novelty. Recent work on the production of transparent conducting coatings on glass for de-icing instrument windows or preventing static charges from building up on them has already borne fruit in commercially available indium, cadmium oxide, and gold coatings on glass squares with light transmissions up to 90 per cent (indium) and resistances from 5,000 (indium) down to 15 (gold) ohms. This augurs well for the prospects of early development of commercial models of some of the useful prototype instruments—a simple radiometer, a capacitance-resistance hygrometer, and a voltage stabilizer, to mention three—shown on the stand of the Department of Scientific and Industrial Research by some of its establishments and the research associations.

The exhibition has brought to mind three matters which might well be given further consideration before the next one is held. First, is the word 'Celsius' to be used instead of 'Centigrade' in accordance with the International Temperature Scale adopted internationally in 1948? Many exhibitors marked their instruments "°C."; but of those who used a complete word, only one was noticed to have employed 'Celsius'. Second, are the results of the recent work by the Naval Motion Study Unit and others on the design of dials and indicators generally applicable? Third, can substantial effort be devoted to finding means of reducing reflexion from instrument windows? With the prevalence of rows of panel-mounted instruments observed by one man who sees each instrument from a different angle and cannot, therefore, avoid reflexions from all of them by moving his head, this trouble has become serious.

OBITUARY

Dr. Tom Goodey, O.B.E., F.R.S.

DR. TOM GOODEY, who died suddenly on the evening of July 7 on his way home from a Friends' meeting, was born at Wellingborough on July 28, 1885. He was educated at the County School, Northampton, and at the University of Birmingham, where he took the degrees of B.Sc. (with honours in zoology and botany) in 1908, M.Sc. in 1909 and D.Sc. in 1915. In 1910 he was elected to the Mackinnon Studentship of the Royal Society. During the year 1912–13 he was protozoologist at Rothamsted Experimental Station and returned there in 1920 after serving during 1913–19 on the staff of the laboratory of agricultural zoology attached to the Department of Zoology at the University of Birmingham. In 1921 he was transferred by the Ministry of Agriculture to the agricultural section which the Ministry subsidized in the Department of Helminthology at the London School of Tropical Medicine. When this Institution became incorporated in the new London School of Hygiene and Tropical Medicine, the Development Commission provided the School with a field station, for the work on agricultural helminthology, at Winches Farm, St. Albans, which later became generally known under the title of Institute of Agricultural Parasitology. There Goodey worked from 1926 until 1947 and ultimately became a principal scientific officer. On the retirement of its director, those members of the staff who were engaged on research into plant-parasitic nematodes were transferred by the Ministry of Agriculture to Rothamsted, and Goodey became head of the new Nematology Department there. Although he retired from this position last year, he continued to take an active share in the work of the Department up to the day of his death.

Goodey's earlier researches were mainly concerned with the activities of Protozoa in the soil; but the investigations by which he acquired an international reputation were those on the nematodes parasitic in and on plants, and the related forms present in soil and fresh water. In 1933 he published "Plant-Parasitic Nematodes and the Diseases they Cause". This was followed in 1951 by "Soil and Fresh-water Nematodes"—the first comprehensive monograph on this subject in the English language.

All his scientific writings were characterized by a clarity and felicity of expression and illustrated by a

fine series of line drawings, to the preparation of which he devoted much care and skill. His work was to him a source of continual delight. He lived a life of imperturbable serenity, deriving additional pleasure from gardening and music. He was the fortunate possessor of a fine tenor voice, which he gladly used on innumerable occasions to assist local charities and

to contribute to the social life of the community in which he lived.

In 1947 Goodey's outstanding contributions to science were recognized by his election to the fellowship of the Royal Society, and those to agriculture by his appointment in 1950 to be an Officer of the British Empire.

R. T. LEIPER

NEWS and VIEWS

The Royal Society and Nuffield Foundation Commonwealth Bursaries Scheme

THE Royal Society and the Nuffield Foundation are to initiate jointly a Commonwealth Bursaries scheme. The Nuffield Foundation is supporting this bursary scheme as a complement to its established programme of Commonwealth fellowships and other awards. The objective of the scheme is to provide facilities for increasing the efficiency of investigators of proved worth by enabling them to pursue research, learn techniques or follow other forms of study where either or both the physical and personal environment overseas in the Commonwealth is peculiarly favourable. The main difference from the ordinary research fellowship is one not merely of duration but also of emphasis, as the bursaries will aim not so much at obtaining the answer to a particular question as at improving the powers of the recipient to extend the bounds of knowledge. The scheme will be operated for an experimental period of five years during which time the Nuffield Foundation will provide £5,000 a year, and this will be devoted to bursaries to United Kingdom scientists who wish to go to overseas parts of the Commonwealth and to scientists of one overseas part of the Commonwealth to go to another. Initially the Royal Society will also make a contribution of £2,500 which will be available for movement in any direction within the Commonwealth, including to the United Kingdom. It is, however, hoped that funds may be obtained from other sources, particularly from overseas, to make possible the full development of the scheme especially by increasing the proportion of bursaries available for scientists of overseas countries of the Commonwealth who desire facilities in the United Kingdom. Each bursary will provide for the cost of travel and maintenance normally for periods of 2-12 months. It will not aim at the provision of any salary as such but will supply maintenance. The applicant must be sponsored by a recognized research authority and must produce evidence that he or she has prior permission to work in the laboratory or other scientific institution chosen. It is expected that in the operation of the scheme Fellows of the Royal Society throughout the Commonwealth will assist in sponsoring and assessing applicants for bursaries.

A joint Royal Society and Nuffield Foundation Commonwealth Bursaries Committee has been set up to administer the scheme on behalf of the sponsors. Its membership is as follows: *Chairman*, Sir Edward Salisbury; *Nominated by Trustees of the Nuffield Foundation*, Mr. Leslie Farrer-Brown, Sir John Stopford and Prof. A. R. Todd; *Nominated by Council of the Royal Society*, Prof. G. R. Cameron, Prof. H. S. W. Massey and Sir Eric Rideal, with Dr. D. C. Martin, assistant secretary, Royal Society, as secretary to the joint Committee. It is proposed initially to consider applications at six-monthly intervals beginning early in 1954. Application forms containing

further details will be obtainable from the Assistant Secretary, the Royal Society, Burlington House, Piccadilly, London, W.1, and must be submitted not later than March 15 and September 15 each year.

Royal Society Research Appointments

THE Council of the Royal Society has made the following research appointments: Mr. P. J. Black (University of Cambridge) to a Mr. and Mrs. John Jaffe Donation Studentship to carry out research on the structural studies of intermetallic compounds at the Crystallographic Laboratory, Cavendish Laboratory, Cambridge; Mr. J. R. Cross (University College, Swansea) to a Mr. and Mrs. John Jaffe Donation Studentship to carry out research on the physical chemistry of cell processes at the Physical Chemistry Laboratory, University of Oxford; Dr. J. E. Falk (University College Hospital Medical School) to a Foulerton Research Fellowship to carry out research on the biochemical mechanisms involved in the production of porphyrins and haemoglobin by animal tissues at University College Hospital Medical School, London; Dr. P. M. Holton (*née* Watson-Williams) (Physiological Laboratory, University of Cambridge) to a Foulerton Research Fellowship to carry out research on chemical transmission in the nervous system at the Physiological Laboratory, University of Cambridge; Mr. A. E. Litherland (University of Liverpool) to a Rutherford Memorial Scholarship to carry out research on fast-neutron spectroscopy at the Atomic Energy of Canada, Ltd., Chalk River, Canada (the financial provision for this Scholarship is being made by the Atomic Energy of Canada, Ltd., with whose agreement the Council of the Royal Society has conferred on Mr. Litherland the title of Rutherford Memorial Scholar); Mr. B. J. Robinson (University of Sydney) to a Rutherford Memorial Scholarship to carry out ionospheric research at the Cavendish Laboratory, Cambridge.

Paris Academy of Sciences: Recent Elections

THE following elections have been made in the Paris Academy of Sciences: Prof. L. Néel, professor of experimental physics in the University of Grenoble, to be non-resident member in succession to the late Prof. J. Haag; Prof. L. Escande, director of the Institute of the Mechanics of Fluids, University of Toulouse, to be *correspondant* for the Mechanics Section in succession to Prof. J. Leray, recently elected member of the Section; and M. A. Coutagne, consulting engineer, to be *correspondant* for the Section of Geography and Navigation in succession to the late Sven Hedin.

Presidency of the Institution of Mining Engineers: Major N. E. Webster, O.B.E.

MAJOR NOEL E. WEBSTER has been elected president of the Institution of Mining Engineers for 1954-55 and will succeed Prof. J. Cecil Mitcheson