

profitable evidence, revealed by boreholes, to correct the interpretation of the geological succession, and second to the salt industry by his supervision of the geological surveying of the Cheshire saltfield, coupled with the siting of the survey's ancillary boreholes. Trotter had noticed that red coloured strata might occur as much as 1,500 feet below the pre-New Red Sandstone land-surface in parts of western England and this led him to postulate widespread Hercynian oxidation, or partial oxidation, of ferrous to ferric iron in association with water tables before the onset of New Red sedimentation. He deduced that this land surface had varied considerably in its content of iron and, where denudation had lowered it through rich siderite-bearing sediments and where favourable geological structures existed below it, rich hematite mineralization was produced as, for example, the Forest of Dean iron-ores in the Carboniferous Limestone. This topic was the subject of one of his two presidential addresses (1951) to the Yorkshire Geological Society—the other (1952) dealt with the origin and devolatilization of coal.

Trotter became the Geological Survey's assistant director for England and Wales in 1955 and held office until 1962. He was chiefly responsible for the arrangements for setting up the survey's North of England regional office in Leeds in 1957 and he was concerned with the British contribution to the Tectonic Map of Europe. He was awarded the Murchison Medal by the Geological Society of London in 1956 and the Sorby Medal by the Yorkshire Geological Society in 1967.

### University News

**Dr R. Smithells** has been appointed professor and head of the Department of Paediatrics and Child Health in the **University of Leeds** on the retirement of **Professor W. S. Craig**.

**Dr D. C. Leslie**, Atomic Energy Establishment, Winfrith, has been appointed to the chair of nuclear engineering tenable at **Queen Mary College, London**. The title of professor has been conferred on the following: **Dr I. M. P. Dawson**, experimental pathology, in respect of his post at **Westminster Medical School**; **Dr R. Duckworth**, oral medicine, in respect of his post at the **London Hospital Medical College**; **Dr Winifred M. Watkins**, biochemistry, in respect of her post at the **Lister Institute of Preventive Medicine**.

**Dr J. E. Bailey**, research director of Morganite Research and Development Limited, has been appointed to the chair of materials technology in the Metallurgy and Materials Technology Department of the **University of Surrey**.

**Dr R. J. Andrew** has been appointed to the chair of animal behaviour in the **University of Sussex**.

### Appointments

**Dr J. H. Mulligan, jun.**, chairman of the Department of Electrical Engineering of New York University, has been appointed executive secretary of the US National Academy of Engineering on the retirement of **Dr H. K. Work**.

**Dr E. F. MacNichol, jun.**, Johns Hopkins University, has been appointed director of the National Institute of Neurological Diseases and acting director of the newly established National Eye Institute of the **US National Institutes of Health**.

**Dr T. M. Durant**, chairman of the Department of Medicine at the Albert Einstein Medical Center in Philadelphia, Pennsylvania, has been appointed chairman of the **Drug Research Board** of the US National Research Council.

**Dr G. H. Dixon**, University of British Columbia, has been appointed director of the Division of Biochemistry and Molecular Biology of the **National Research Council of Canada**.

**Mr F. H. Jacob**, Plant Pathology Laboratory, has been appointed director of the Ministry of Agriculture, Fisheries and Food Infestation Control Laboratory on the retirement of **Dr I. Thomas**.

**Dr H. C. Pereira** has been appointed director of the **East Malling Research Station** in succession to **Dr F. R. Tubbs**. It is hoped that Dr Pereira will be free to take up his duties on July 1, 1969. Dr Pereira was director of the Agricultural Research Council of Central Africa until its dissolution at the end of last year.

**Mr D. J. Skidmore** has been appointed director of research and development (mining) by the **National Coal Board**, and **Mr W. Rowell** has been appointed to succeed him as area director of the Scottish North Area.

The MRC Infantile Malnutrition Research Unit, Mulago Hospital, Kampala, Uganda, has been renamed **Child Nutrition Research Unit**, and **Dr R. G. Whitehead**, at present working in the Infant Nutrition Research Division of the Dunn Nutritional Laboratory, Cambridge, has been appointed director of the unit on the retirement of **Professor R. A. McCance**.

### Announcements

The following fellowships have been awarded by the Royal Society: the *Alan Johnston, Laurence and Moseley research fellowship* to **Dr J. P. Arbuthnott** of the Department of Microbiology, University of Glasgow; a *Locke research fellowship* to **Dr D. A. B. Young** of the Institut de Biochimie Clinique, University of Geneva; a *Mr and Mrs John Jaffé donation research fellowship* to **Dr E. A. Davis** to enable him to carry out research at the Cavendish Laboratory, Cambridge. The *Bruno Mendel travelling fellowships* for 1968-69 have been awarded to **Dr R. V. Coxon**, University Laboratory of Physiology, Oxford, to enable him to work in the Department of Physiology, Hadassah Medical School, and to **Dr H. Ginsburg**, Department of Cell Biology, The Weizmann Institute of Science, to enable him to work in the Department of Pathology, St Mary's Hospital Medical School, London.

The **Royal Society Mullard Award** for 1968 is to be presented to **Mr L. A. B. Pilkington**, director of Pilkington Brothers Limited, St Helens, Lancashire, for his advances in the technology of glass manufacture and, in particular, for his invention and development of the float glass process. The award, which consists of a gold medal and a prize of £1,000, is given annually for an important contribution to the advance of science, engineering or technology that in the preceding ten years has led directly to national prosperity in the United Kingdom.

**Dr R. C. Mackenzie**, head of the Department of Pedology at the Macaulay Institute for Soil Research, Aberdeen, is the first recipient of the **Mettler Award in Thermal Analysis**. This \$1,000 award, sponsored by the Mettler Instrument Corporation, Princeton, New Jersey, is given in recognition of work in the field of dynamic thermal analysis.

### International Meetings

September 16-18, **Chromatography and Electrophoresis**, Brussels (Belgian Society of Pharmaceutical Sciences, 11 rue Archimède, Brussels 4, Belgium).

September 16-20, **Progress in Overhead Lines and Cables for 220 kV and Above**, Institution of Electrical Engineers (Press Officer, The Institution of Electrical Engineers, Savoy Place, London, WC2).

September 16-28, **New Methods in Low-Angle X-ray Diffraction and Electron Microscopy for Biological Structure Determination**, Cambridge (Dr H. E. Huxley and Dr A. Klug, Laboratory of Molecular Biology, Hills Road, Cambridge).

September 17–18, **Transport Engines of Exceptionally High Specific Output**, Nottingham (Conference Department, Institution of Mechanical Engineers, 1 Birdcage Walk, London, SW1).

September 18–19, **Electrical Properties of Polymers, Cardiff** (Mr M. E. Baird, Department of Applied Physics, University of Wales, Institute of Science and Technology, Cathays Park, Cardiff).

September 18–20, **Gas Filled Valves**, Manchester (The Meetings Officer, The Institute of Physics and The Physical Society, 47 Belgrave Square, London, SW1).

September 19–22, **Plasma Diagnostics**, UKAEA Culham Laboratory, Abingdon, Berks (The Meetings Officer, The Institute of Physics and The Physical Society, 47 Belgrave Square, London, SW1).

September 22–25, **Tripartite Chemical Engineering Conference**, Montreal (Institution of Chemical Engineers, 16 Belgrave Square, London SW1).

September 24–26, **Autumn Meeting of the Chemical Society**, Keele (Dr John F. Gibson, The Chemical Society, Burlington House, London, W1).

September 27, **Resistance to Pests and Diseases induced in Plants by Externally Applied Chemicals**, London (Dr M. B. Green, Development Department, ICI Limited, PO Box 13, The Heath, Runcorn, Cheshire).

September 27–28, annual general meeting of the **Materials Science Club** and meeting on **Materials in Medicine**, Worcester (Dr G. F. Freeguard, Department of Chemical Engineering, The University, Nottingham).

September 30–October 2, **European Phage Meeting**, Naples (International Laboratory of Genetics and Biophysics, Naples, Italy).

**ERRATUM.** In the communication "Index of Solar Radio Burst Activity at 10.7 cm" by D. Basu (*Nature*, 219, 597; 1968) the expression  $10^{-22} \times W^{-2}$  in the second paragraph should read  $10^{-22} W m^{-2}$ .

**ERRATUM.** In the article "Trace Elements in Carbonatites and Limestones" by P. Bowden (*Nature*, 219, 716; 1968) reference 5 in the last paragraph should read reference 6.

**ERRATUM.** In the second paragraph of the article "Antarctic Ecology" (*Nature*, 219, 677; 1968) the third sentence should read "... because water freezes above  $-2^{\circ}C$ ".

**ERRATUM.** In the article "The Molecular Basis of Visual Excitation" by George Wald (*Nature*, 219, 800; 1968) a reference to Fig. 7 in the third paragraph on page 803 should be to Fig. 6.

**ERRATUM.** In the article "Pulsation Periods of Rotating White Dwarf Models" by J. P. Ostriker and J.-L. Tassoul (*Nature*, 219, 577; 1968) the expression  $\sigma_{\frac{2}{R}}$  in the tenth line of the second paragraph on page 578 should read  $\sigma_{\frac{2}{R}}$ .

**ERRATUM.** In the article "Factor Fraction required for the Synthesis of Bacteriophage Q $\beta$ -RNA" by M. T. Franze de Fernandez, Lillian Eoyang and J. T. August (*Nature*, 219, 588; 1968) the introductory paragraph included a reference to "the last bacterium"; this should read "the host bacterium".

**ERRATUM.** The introductory paragraph of the article "Environmental and Behavioural Processes in a Desert Locust Outbreak" by Jeremy Roffey and George Popov (*Nature*, 219, 446; 1968) unfortunately failed to highlight the new concept which the authors introduced in the article. They feel that a more appropriate phrasing would have been: "The build-up of a desert locust outbreak is seen as a result of three concurrent interrelated processes, concentration, multiplication and gregarization".

## FORTHCOMING EVENTS

(Meetings marked with an asterisk are open to the public)

Tuesday, September 10—Wednesday, September 11

ZOOLOGICAL SOCIETY OF LONDON (in the Meeting Room of the Society, Regent's Park, London, NW1), at 10 a.m. daily—Symposium on "The Biology of the Porifera", followed by two days of colloquia at the British Museum (Natural History).

Wednesday, September 11—Friday, September 13

SOCIETY OF CHEMICAL INDUSTRY, PLASTICS AND POLYMER GROUP (at Churchill College, Cambridge)—Meeting on "Application of Structural Analysis to Polymers".

## APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

RESEARCH ASSISTANT (with a good honours degree in psychology or linguistics, and preferably an interest in psycholinguistics and a good knowledge of French) in the DEPARTMENT OF PSYCHOLOGY, to work on a project studying the performance of conference interpreters—The Registrar and Secretary, University of Durham, Old Shire Hall, Durham (September 11).

RESEARCH ASSISTANT (preferably with a higher degree) to work on the extracellular products of microphytes and their ecological importance—The Secretary, Department of Biochemistry, Queen Elizabeth College (University of London), Campden Hill Square, London, W8 (September 12).

RESEARCH ASSISTANT in GEOLOGY in the DEPARTMENT OF GEOLOGY and GEOGRAPHY for work in the fields of structural geology, regional petrological studies, or geochemical studies of ore deposits or sediments—The Registrar, Kingston College of Technology, Penrhyn Road, Kingston upon Thames, Surrey (September 13).

TEMPORARY LECTURER/SENIOR LECTURER (with a PhD degree and postgraduate experience in the field of economic entomology and preferably training in insect physiology), in ENTOMOLOGY at the University of Queensland, Brisbane, Australia—The Association of Commonwealth Universities (Branch Office), Marlborough House, Pall Mall, London, SW1 (London and Brisbane, September 13).

BIOCHEMIST in the DEPARTMENT OF MEDICINE for research into cancer and bone metabolism—The Secretary, King's College Hospital Medical School (University of London), Denmark Hill, London, SE5 (September 14).

ASSISTANT LECTURER (with a registrable qualification in veterinary medicine, or an honours degree in pharmacology, or a related subject) in the DEPARTMENT OF VETERINARY PHARMACOLOGY, Royal (Dick) School of Veterinary Studies—The Secretary, University of Edinburgh, Old College, South Bridge, Edinburgh, 8 (September 15).

LECTURER (experimental physicist) in PHYSICS—The Registrar, King's College London, Strand, London, WC2 (September 16).

POSTGRADUATE FELLOW (preferably with a research degree and some knowledge of strata control in mines) in the DEPARTMENT OF MINING to lead a research project, sponsored by the NCB, into strata control aspects of the design and layout of mine workings with particular reference to roadways—The Registrar, University of Nottingham, Nottingham (September 16).

PRINCIPAL LECTURER (with high academic qualifications and industrial, research and/or teaching experience) in BIOCHEMISTRY (in clinical or general biochemistry)—The Principal, Lanchester College of Technology, Priory Street, Coventry (September 16).

INDUSTRIAL RESEARCH FELLOWS in COMPUTER SCIENCE, to work on the design and implementation of the hardware and software for a large computer system—The Registrar, The University of Manchester, Manchester, 13, quoting Ref. 154/68 (September 20).

LABORATORY TECHNICIAN (preferably with some experience in biology or chemistry, ordinary or advanced levels) in the DEPARTMENT OF BOTANY AND CELL BIOLOGY to assist in the preparation of practical work for BSc and higher degrees—Clerk to the Governing Body, Woolwich Polytechnic, Wellington Street, London, SE18 (September 20).

MILK MARKETING BOARD RESEARCH STUDENTS (2) (graduates in microbiology or another appropriate science) in the DEPARTMENT OF BIOLOGICAL SCIENCES to participate in research on the microbiological treatment of dairy farm effluents—Dr J. E. Smith, University of Surrey, 14 Falcon Road, London, SW11 (September 21).

RESEARCH ASSISTANT (preferably with a higher degree (PhD), but graduates having a good honours degree would be considered) in the DEPARTMENT OF GEOLOGY, to take part in a laboratory investigation of sediments from the Humber Estuary—The Registrar, The University, Sheffield, quoting Ref. R. 82/A (September 21).

LECTURER in the DEPARTMENT OF BIOCHEMISTRY—The Secretary, Chelsea College of Science and Technology, Manresa Road, London, SW3 (September 25).

LECTURER (with a higher degree and preferably teaching experience and/or industrial experience in either enzymology or lipid biochemistry) in BIOCHEMISTRY—Clerk to the Governing Body, Woolwich Polytechnic, Wellington Street, London, SE18 (September 25).

NATURAL HISTORY ASSISTANT (university graduate or with comparable qualifications in biology, zoology, entomology or botany) at the County of Warwick Museum—R. M. Willis, Clerk to the Council, Shire Hall, Warwick (September 25).

READER in MATHEMATICS at Monash University—The Academic Registrar of the University, Clayton, Victoria 3168, Australia; or The Secretary-General, Association of Commonwealth Universities (Branch Office), Marlborough House, Pall Mall, London, SW1 (September 30).

SENIOR LECTURERS or LECTURERS in PHYSICAL and ECONOMIC GEOGRAPHY at the University College of Rhodesia—The Inter-University Council, 33 Bedford Place, London, WC1 (October 8).

SENIOR LECTURER or LECTURER in MATHEMATICS at the University of Canterbury, Christchurch, New Zealand—The Association of Commonwealth Universities (Branch Office), Marlborough House, Pall Mall, London, SW1 (October 16).

BIOCHEMIST (with a degree in veterinary science, science, agricultural science, rural science or equivalent qualifications, and a PhD degree in an appropriate field, or postgraduate research experience of equivalent standard and duration, supported by satisfactory evidence of research ability) at the McMaster Laboratory, Division of Animal Health, CSIRO, Sydney, NSW, Australia, to develop a research programme related to studies on host-parasite relationships, particularly with regard to helminth infections of