

FORTHCOMING EVENTS

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

Monday, April 2

INSTITUTION OF ELECTRICAL ENGINEERS, ELECTRONICS AND COMMUNICATIONS SECTION (at Savoy Place, London, W.C.2), at 5.30 p.m.—Mr. R. A. Burberry: "Progress in Aircraft Aerials".

SOCIETY OF ENGINEERS (at the Geological Society, Burlington House, Piccadilly, London, W.1), at 5.30 p.m.—Mr. S. B. Warder: "Railway Electrification".

Monday, April 2—Wednesday, April 4

BRITISH INSTITUTION OF RADIO ENGINEERS, LONDON SECTION (at the School of Pharmacy, Brunswick Square, London, W.C.1), at 10 a.m. on Monday and 9.30 a.m. on Tuesday and Wednesday—Symposium on "Recent Developments in Industrial Electronics".

Tuesday, April 3

INSTITUTION OF ELECTRICAL ENGINEERS, MEASUREMENT AND CONTROL SECTION (at Savoy Place, London, W.C.2), at 5.30 p.m.—Discussion on "Design and Application of Read-Only Memories for Digital Computers" opened by Mr. D. M. Taub.

SCIENCE FORUM (at Friends House, Euston Road, London, N.W.1), at 7.30 p.m.—Mr. N. W. Pirie, F.R.S.: "Food Production for an Expanding Population".

Wednesday, April 4

ROYAL SOCIETY OF ARTS (at John Adam Street, Adelphi, London, W.C.2), at 2.30 p.m.—Mr. F. P. W. Winterringham: "Action and Inaction of Insecticides" (Fernhurst Lecture).

ROYAL STATISTICAL SOCIETY (at the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1), at 5 p.m.—Dr. G. E. P. Box and Dr. G. M. Jenkins: "Some Statistical Aspects of Adaptive Optimization and Control".

ROYAL SOCIETY OF MEDICINE, HISTORY OF MEDICINE SECTION (at 1 Wimpole Street, London, W.1), at 5.15 p.m.—Dr. K. D. Keele "Harvey as Morbid Anatomist" (Presidential Address).

INSTITUTE OF PETROLEUM (at 61 New Cavendish Street, London, W.1), at 5.30 p.m.—Mr. J. C. Taylor: "Recovery and Containing of Oil Spills".

INSTITUTION OF MECHANICAL ENGINEERS (at 1 Birdcage Walk, Westminster, London, S.W.1), at 6 p.m.—Major-General D. A. K. Redman: "The Corps of Royal Electrical and Mechanical Engineers—its Responsibilities and Problems".

SOCIETY FOR ANALYTICAL CHEMISTRY (at the Chemical Society, Burlington House, Piccadilly, London, W.1), at 7 p.m.—Mr. D. F. Wood and Mr. R. T. Clark: "Square Wave Polarography with Special Reference to the Analysis of Zirconium and Hafnium"; Mr. A. W. Titley: "The Determination of Gold by Extractive Titration"; Mr. P. G. W. Scott and Mr. T. A. Strivens: "An Automatic Coulometric Titration Assembly".

Wednesday, April 4—Saturday, April 7

INSTITUTE OF PHYSICS and the PHYSICAL SOCIETY (in collaboration with the BRITISH NUCLEAR ENERGY SOCIETY, at Bournemouth)—Symposium on "The Physics of Graphite-Moderated Reactors".

Thursday, April 5

BIOCHEMICAL SOCIETY (in the William Beveridge Hall, Senate House, University of London, W.C.1), at 5.30 p.m.—Dr. P. Zamecnik: "Intermediate Reactions in Protein Biosynthesis" (First Jubilee Lecture).

INSTITUTE OF REFRIGERATION (at the Institute of Marine Engineers, The Memorial Building, 76 Mark Lane, London, E.C.3), at 5.30 p.m.—Mr. F. L. Pettman: "The Design and Manufacture of Packaged Air Conditioning Units".

INSTITUTION OF ELECTRICAL ENGINEERS (at Savoy Place, London, W.C.2), at 5.30 p.m.—Mr. H. R. Broadbent, Mr. J. Beasley and Mr. J. C. Turrall: "Development of a Regenerative Braking System for Multiple-Unit Stock".

SOCIETY OF CHEMICAL INDUSTRY, FINE CHEMICALS GROUP (at 14 Belgrave Square, London, S.W.1), at 6.30 p.m.—Annual General Meeting. Dr. A. C. C. Newman: "Some Aspects of the Development Problem in the Pharmaceutical Industry" (Chairman's Address).

WOMEN'S ENGINEERING SOCIETY, LONDON BRANCH (at "Hope House", 45 Great Peter Street, London, S.W.1), at 7 p.m.—Dr. F. Din: "The Liquefaction of Gases".

Thursday, April 5—Friday, April 6

NORTHAMPTON COLLEGE OF ADVANCED TECHNOLOGY (in the Chemistry Department, St. John's Street, London, E.C.1)—Symposium on "Some Applications of Methods Used for Determining the Number and Size of Molecules".

LINNEAN SOCIETY OF LONDON (at Burlington House, Piccadilly, London, W.1), at 9.45 a.m. daily—International Symposium on "The Growth and Development of the Lower Archegoniate Plants".

Friday, April 6

NORTH EAST COAST INSTITUTION OF ENGINEERS AND SHIPBUILDERS (at Bolbec Hall, Newcastle upon Tyne 1)—Mr. G. Yellowley: "Recent Development in the Gotaverken Oil Engine".

BIOCHEMICAL SOCIETY (in the Department of Biochemistry, University College, Gower Street, London, W.C.1), at 10 a.m.—Scientific Papers. 2 p.m.—Annual General Business Meeting.

ROYAL STATISTICAL SOCIETY (at the London School of Economics and Political Science, Houghton Street, London, W.C.2), at 10 a.m.—Meeting on "Food Supplies and Population Growth". Principal Speakers: Dr. B. Benjamin, Dr. R. Passmore, Mr. N. W. Pirie, F.R.S., and Prof. Colin Clark.

INSTITUTION OF ELECTRICAL ENGINEERS, MEDICAL ELECTRONICS AND DISCUSSION GROUP (at Savoy Place, London, W.C.2), at 6 p.m.—Discussion on "Analogues".

SOCIETY OF CHEMICAL INDUSTRY (joint meeting of the LONDON SECTION and the HEAVY ORGANIC CHEMICALS GROUP, at 14 Belgrave Square, London, S.W.1), at 6.30 p.m.—Mr. P. E. Rousseau (South Africa): "Organic Chemicals and the Fischer-Tropsch Synthesis in South Africa".

APPOINTMENTS VACANT

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

SENIOR LECTURER, LECTURER and ASSISTANT LECTURER (Grade "B") IN MATHEMATICS and in PHYSICS—The Registrar and Clerk to the Governors, College of Technology, Park Road, Portsmouth (April 6).

SENIOR RESEARCH OFFICER or RESEARCH OFFICER (with a good background in mathematics, mathematical statistics and economics, together with some industrial experience and an interest in the practical application of mathematical and statistical models to the solution of decision problems) AT THE CENTRE FOR BUSINESS RESEARCH to work on problems in applied decision theory—Prof. J. Johnston, Department of Economics, The University, Manchester (April 9).

LEVERHULME RESEARCH FELLOW IN THE DEPARTMENT OF PHYSICS—The Secretary, St. Mary's Hospital Medical School, Paddington, London, W.2 (April 10).

LEVERHULME STUDENT (with a postgraduate diploma in chemical engineering or equivalent qualifications) IN CHEMICAL ENGINEERING—The Registrar, King's College (University of London), Strand, London, W.C.2 (April 11).

ASSISTANT LECTURER IN VETERINARY PHYSIOLOGY at the Royal (Dick) School of Veterinary Studies—The Secretary, The University, Edinburgh (April 12).

LECTURER or SENIOR LECTURER IN THEORETICAL PHYSICS—The Registrar and Secretary, King's College (University of Durham), Newcastle upon Tyne 1 (April 14).

LECTURERS or ASSISTANT LECTURERS (2) IN THE DEPARTMENT OF PURE MATHEMATICS—The Registrar, University College of Wales, Aberystwyth (April 18).

RESEARCH ASSISTANT (with an honours degree in botany and an interest in field work) IN THE DEPARTMENT OF BOTANY, for work on *Spartina*, with particular reference to its control—The Registrar, The University, Liverpool, quoting Ref. CV/37/N (April 18).

SENIOR TECHNICIAN or TECHNICIAN IN THE DEPARTMENT OF AGRICULTURAL CHEMISTRY AND PEDOLOGY, University of Khartoum—The Registrar, University of Khartoum, c/o Inter-University Council for Higher Education Overseas, 29 Woburn Square, London, W.C.1 (April 18).

RESEARCH FELLOW IN BIOCHEMISTRY at the University College, Ibadan, Nigeria—The Secretary, Inter-University Council for Higher Education Overseas, 29 Woburn Square, London, W.C.1 (April 19).

LECTURERS (2) IN PATHOLOGY at the Royal Infirmary—The Secretary of University Court, The University, Glasgow (April 21).

SENIOR LECTURER or LECTURER IN CHEMISTRY at the University of Cape Town—The Secretary, Association of Universities of the British Commonwealth (Branch Office), Marlborough House, Pall Mall, London, S.W.1; and the Registrar, University of Cape Town, Private Bag, Rondebosch, Cape Town, South Africa (April 22).

ASSISTANT LECTURER IN PHILOSOPHY—The Registrar, The University, Keele, Staffs (April 23).

ASSISTANT IN RESEARCH (with an honours in zoology, physiology or agriculture, and preferably interests in animal physiology) IN ANIMAL PHYSIOLOGY—The Secretary, School of Agriculture, The University, Downing Street, Cambridge (April 24).

ASSISTANT LECTURER (with a first- or second-class degree in biochemistry, physiology or zoology, and an interest in research into chemical aspects of reproduction in the fowl) IN THE DEPARTMENT OF POULTRY RESEARCH—The Secretary, Wye College (University of London), near Ashford, Kent. (April 30).

ASSOCIATE PROFESSOR IN MEDICINE at the University of Sydney, Australia—The Secretary, Association of Universities of the British Commonwealth (Branch Office), Marlborough House, Pall Mall, London, S.W.1 (Australia and London, April 30).

CHAIR OF PHYSIOLOGY AND BIOCHEMISTRY—The Secretary and Registrar, The University, Southampton (April 30).

LECTURER (either a graduate in pharmacy, or a graduate in science, with chemistry, organic chemistry or biochemistry as a principal subject) IN PHARMACEUTICAL CHEMISTRY—The Registrar, The University of Adelaide, Adelaide, South Australia (April 30).

LECTURER or ASSISTANT LECTURER IN CHEMISTRY at the University of Singapore—The Secretary, Inter-University Council for Higher Education Overseas, 29 Woburn Square, London, W.C.1 (April 30).

LECTURER or ASSISTANT LECTURER (with a special interest in microbiology, bacteriology or protozoology) IN THE DEPARTMENTS OF BOTANY AND ZOOLOGY—The Registrar, University College, Singleton Park, Swansea (April 30).

LECTURER (with a first- or second-class honours degree in botany or in agricultural botany, or in a combination of these subjects) IN AGRICULTURAL BOTANY—The Secretary, North of Scotland College of Agriculture, 41½ Union Street, Aberdeen (April 30).

RESEARCH FELLOW (graduate in biochemistry, with research experience, and interested in the study of physiological aspects of embryonic mortality in pigs) IN BIOCHEMISTRY at the School of Agri-

culture, Sutton Bonington, near Loughborough—The Registrar, The University, Nottingham (April 30).

LECTURER/SENIOR LECTURER IN AGRONOMY at the University of Western Australia—The Secretary, Association of Universities of the British Commonwealth (Branch Office), Marlborough House, Pall Mall, London, S.W.1 (Australia and London, May 5).

SENIOR LECTURER or LECTURER IN ELECTRONIC PHYSICS IN THE DEPARTMENT OF ELECTRICAL ENGINEERING—The Secretary (University of St. Andrews), Queen's College, Dundee (May 12).

LECTURER IN PHILOSOPHY at the University of Otago, Dunedin, New Zealand—The Secretary, Association of Universities of the British Commonwealth (Branch Office), Marlborough House, Pall Mall, London, S.W.1 (New Zealand and London, May 15).

DEMONSTRATOR (graduate in botany and a research interest in plant physiology) IN THE DEPARTMENT OF BOTANY—Prof. Carr, Department of Botany, David Keir Building, The University, Stranmillis Road, Belfast 9 (May 30).

NORTH THAMES GAS BOARD RESEARCH FELLOW IN THE DEPARTMENT OF CHEMICAL ENGINEERING AND CHEMICAL TECHNOLOGY, for research into carbonization, gaseous fuels and combustion—The Registrar, Imperial College of Science and Technology, Prince Consort Road, London, S.W.7 (July 7).

ANIMAL HUSBANDRY OFFICERS (male, between 23 and 44, with a degree in agriculture or veterinary science and experience in animal management, breeding and fodder production) in Northern Nigeria, for the general development of the livestock industry—The Director of Recruitment, Department of Technical Co-operation, Carlton House Terrace, London, S.W.1, quoting RC.213/108/04/CI.

ASSISTANT LECTURER (graduate, with a recognized qualification in microbiology, and preferably some teaching experience) IN MICROBIOLOGY IN THE DEPARTMENT OF HEALTH EDUCATION—The Clerk to the Governing Body, Battersea College of Technology, London, S.W.11.

CHEMISTRY MASTER, for work up to advanced level—The Headmaster, School House, Rugby.

EDITORIAL ASSISTANT (preferably with some knowledge of chemistry) in the office of *Analytical Abstracts*—The Editor, *Analytical Abstracts*, 14 Belgrave Square, London, S.W.1.

FOREST MENSURATIONISTS (with a degree in forestry and experience in mensuration, mathematics or statistics) IN THE DEPARTMENT OF FORESTRY, Ottawa—Civil Service Commission, Ottawa, Canada, requesting Information Circular 62-1455.

HEAD (with the qualifications, teaching and research experience necessary for recognition as a teacher of the University of London) OF THE DEPARTMENT OF METALLURGY—The Secretary, Sir John Cass College, Jewry Street, London, E.C.3.

JUNIOR LABORATORY TECHNICIAN, for histological and research work IN THE DEPARTMENT OF ANATOMY—The Secretary, King's College (University of London), Strand, London, W.C.2, quoting Ref. 4293.

LECTURER (with a degree in metallurgy or chemistry) IN THE DEPARTMENT OF METALLURGY, to teach chemical metallurgy with particular reference to solid materials—Prof. F. D. Richardson, Department of Metallurgy, Imperial College of Science and Technology, Prince Consort Road, London, S.W.7.

LECTURER (with a good honours degree in mathematics and teaching and/or research experience) IN MATHEMATICS—The Principal, South-East Essex Technical College, Longbridge Road, Dagenham, Essex.

LECTURER (with a special interest in numerical analysis) IN COMPUTING IN THE DEPARTMENT OF MATHEMATICS—The Clerk to the Governing Body, Battersea College of Technology, London, S.W.11.

PHYSICIST, to teach up to Open Scholarship standard—The Master, Marlborough College, Marlborough, Wilts.

PROFESSORS OF APPLIED MATHEMATICS, PHYSICS, MECHANICAL ENGINEERING, ELECTRICAL ENGINEERING, and ARCHITECTURE AND TOWN PLANNING at the Institute of Technology, Haifa, Israel—British Technion Society, 83 Wimpole Street, London, W.1.

RESEARCH ASSISTANT (science graduate), for work with tissue culture in relation to carcinogenesis—Prof. H. N. Green, Department of Experimental Pathology and Cancer Research, School of Medicine, Leeds 2.

RESEARCH ASSISTANT (with an honours degree or equivalent qualification), to assist in research on subjective brightness—Head, Department of Applied Physics, Northampton College of Advanced Technology, St. John Street, London, E.C.1.

RESEARCH ASSISTANT (with a good honours degree or equivalent qualifications) IN THE SPACE RESEARCH GROUP within the Department of Physics—Dr. T. R. Kaiser, Department of Physics, The University, Sheffield 10.

SENIOR TECHNICIAN IN THE RADIOTHERAPY DEPARTMENT—The Medical Superintendent, Western Infirmary, Glasgow, W.1.

REPORTS and other PUBLICATIONS

(not included in the monthly Books Supplement)

Great Britain and Ireland

Bulletin of the British Museum (Natural History). Zoology. Vol. 8, No. 3: Chilean Species of the Genus *Eupsophus* (Anura: Leptodactylidae). By Alice G. C. Grandison. Pp. 111-149 + plates 1-7. (London: British Museum (Natural History), 1961.) 25s. [2212]

Ministry of Housing and Local Government. Wear and Tees Rivers: Hydrological Survey, (Hydrometric Areas 24 and 25). Pp. iv + 103. (London: H.M. Stationery Office, 1961.) 15s. [2212]

General Register Office. The Registrar (General's) Quarterly Return for England and Wales: Births, Deaths and Marriages; Infectious Diseases: Weather: Population Estimates, quarter ended 30th September 1961, (No. 451). Pp. 20. (London: H.M. Stationery Office, 1961.) 2s. 6d. net. [2212]

Southern Regional Council for Further Education. Fourteenth Annual Report, October 1961. Pp. 38. (Reading: Southern Regional Council for Further Education, 1961.) [2012]

Transactions of the Royal Society of Edinburgh. Vol. LXIV., No. 15: Some Pteridosperm Seeds from the Calciferous Sandstone Series of Herwickshire. By Albert G. Long. Pp. 401-420 + 4 plates 10s. 6d. Vol. LXIV., No. 16: The Tertiary Pollen-Flora of Mull and Ardnamurchan. By Dr. J. B. Simson. Pp. 421-468 + 20 plates. 30s. (Edinburgh: Royal Society of Edinburgh, 1961.) [2912]

Trans-Antarctic Expedition, 1955-1958. Scientific Reports. No. 5: Glaciology. 1: Solid Precipitation and Drift Snow. By H. Lister. Pp. 51 + 5 plates. 30s. net. No. 12: Metamorphosed Coal from the Theron Mountains. By H. R. Brown and G. H. Taylor. Pp. 10 + 6 plates. 10s. 6d. net. (London: Trans-Antarctic Expedition Committee, 22 Gayfere Street, S.W.1, 1960.) [2912]

The Oneness of All Being: a Plea for a Compassionate Way of Living. By Ernest Breuer. Pp. 12. (Sherborne: Ernest Breuer, Pleck House, Holwell, 1961.) [11]

Department of Scientific and Industrial Research. Memoirs of the Geological Survey of Great Britain—England and Wales. Geology of the Country around Clitheroe and Nelson, (One-Inch Geological Sheet 68, New Series.) By Dr. J. R. Earp, D. Magraw, E. G. Poole, D. H. Land and Dr. A. J. Whiteman. With contributions by M. A. Calver, W. H. C. Ramsbottom and Dr. P. A. Sabine. Pp. ix + 346 + 12 plates. (London: H.M. Stationery Office, 1961.) 45s. net. [11]

Other Countries

Canada: Department of Mines and Technical Surveys. Geological Survey of Canada. Memoir No. 312: Whitehorse Map-Area, Yukon Territory, 105D. By J. O. Wheeler. Pp. xiv + 156 + 14 plates. 2 dollars. Paper 61-11: Type Sections of some Formations of the Lower Cretaceous Fort St. John Group near Pine River, British Columbia. By D. F. Stott. Pp. iii + 61. 50 cents. Geological Maps—Preliminary Series. Map 11-1961: Pine Pass, British Columbia. Map 34-1961: Surficial Geology—Rustico (East half). (Ottawa: Queen's Printer, 1961.) [1812]

Geological Survey of British Guiana. Geological Maps. Quarter Degree Sheet 0859 S.W.: Maburama, S.W. Quarter Degree Sheet 0759 N.W.: Waini, N.W. Quarter Degree Sheet 0760 N.E.: Baramita, N.E. (Georgetown: Geological Survey, 1961.) 1 dollar (B.W.I.) each. [1912]

Metropolitan Life Insurance Company. Statistical Bulletin Vol. 42, (October, 1961): The 1961 Company Award for Safety Research. Hospital Utilization in an Industrial Area—Surgical Cases. A Decade of Population Growth—White and Nonwhite. Factors in Mortality from Cerebral Vascular Diseases. Pp. 12. (New York: Metropolitan Life Insurance Company, 1961.) [1912]

Memorie dell'Istituto Italiano di Idrobiologia Dott. Marco de Marchi, Vol. XIII. Pp. 222. (Verbania Pallanza: Istituto Italiano di Idrobiologia Dott. Marco de Marchi, 1961.) [1912]

Durban Museum Novitates. Vol. 6, Part 10 (31st October 1961): On Some Crabs Trawled Off the Natal Coast. By John R. Grindley. Pp. 127-134. 30 cents. Vol. 6, Part 11 (31st October 1961): The Taxonomic Status and Relationship of *Serinus cibrinipectus* Clancey and Lawson, with Notes on Related Members of the Genus. By Michael P. Stuart Irwin. Pp. 135-148. 40 cents. Vol. 6, Part 12 (31st October 1961): Notes on Southern and East African Iats. By David L. Harrison. Pp. 149-152. 25 cents. (Durban: Durban Museum, 1961.) [1912]

South African Council for Scientific and Industrial Research. 1961 Register of Current Scientific Research at South African Universities. Pp. vi + 112. (Pretoria: South African Council for Scientific and Industrial Research, 1961.) R. 1.50. [1912]

Soils Research and Survey Section of the Regional Research Centre, Imperial College of Tropical Agriculture, Trinidad. Soil and Land-Use Surveys No. 13: a Detailed Soil and Land Capability Survey of a Cacao Area in Trinidad. By G. Favord. Pp. 59. (St. Augustine, Trinidad: Imperial College of Tropical Agriculture, 1961.) 20s. [1912]

Commonwealth Scientific and Industrial Research Organization, Australia. Annual Reports, 1960-1961. Division of Building Research. Pp. vi + 66. Division of Entomology. Pp. v + 46. Animal Research Laboratories. Pp. 126. Division of Land Research and Regional Survey. Pp. i + 36. Mineralogical Investigations. Pp. 1 + 8. Wool Research Laboratories. Pp. 1 + 41. Division of Fisheries and Oceanography. Pp. ii + 31. Division of Plant Industry. Pp. xi + 194. (Melbourne and Canberra: Commonwealth Scientific and Industrial Research Organization, 1961.) [2012]

Australian Aboriginal Rock Art. By Frederick D. McCarthy. Pp. 18 + 2 plates. Australian Aboriginal Decorative Art. By Frederick D. McCarthy. Pp. 60 + 2 plates. (Sydney: The Australian Museum, 1958.) [2212]

New Zealand Marine Department: Fisheries Technical Report No. 3: Fisheries Research in the East Cape Area. By Miss M. K. McKenzie. (Paper presented at the Royal Society of New Zealand Ninth Science Congress, 1960.) Pp. 9. (Wellington, N.Z.: New Zealand Marine Department, 1961.) [2712]

National Academy of Sciences—National Research Council. NAS-NS 3047: The Radiochemistry of Silver. By D. N. Sunderman and C. W. Townley. Pp. v + 55. (Washington, D.C.: Office of Technical Services, Department of Commerce, 1961.) 75 cents. [2712]

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