

changes with the temperature. Magnetic studies have confirmed the predictions as to the fine structure of potassium permanganate single crystals drawn from X-ray studies. The Hall effect of molybdenite has also been investigated, and in a study of the fluorescence of anthracene crystals containing naphthalene, excited by monochromatic radiation, it has been shown that the position and number of fluorescent bands of naphthalene are independent of the wave-length of the radiation, and that the intensity of fluorescence rapidly falls to zero as the wave-length of the exciting radiation increases beyond the central part of the longest absorption band.

Research work carried out by Dr. S. C. Sirkar covers the Raman spectra of ethyl, methyl, propyl and butyl sulphide in the solid state at the temperature of liquid oxygen. The investigation has been extended to aromatic compounds of high boiling point, such as benzyl alcohol, benzylamine and benzoyl chloride. An X-ray analysis of jute fibre has led to the grouping of the fibres into four broad classes, and the result may lead to the development of a method of classification of jute fibre similar to that adopted by the U.S. Government for cotton fibres. Mr. B. C. Guha has studied the temperature variation of anisotropy of many paramagnetic ions in crystals of salts of the iron group of metals over the temperature range 300°–80° K.

FORTHCOMING EVENTS

Monday, January 15

ROYAL GEOGRAPHICAL SOCIETY (at Kensington Gore, South Kensington, London, S.W.7), at 8 p.m.—Brigadier R. A. Bagnold: "The Early Work of the Long Range Desert Group".

Tuesday, January 16

BRITISH PSYCHOLOGICAL SOCIETY (INDUSTRIAL SECTION) (at the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1), at 1.15 p.m.—Dr. A. H. Seymour: "Psychological Problems of the Personnel Function in Industry".

ROYAL SOCIETY OF ARTS (DOMINIONS AND COLONIES SECTION) (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Mr. G. B. Gresford: "Scientific Aspects of Australia's Industrial Development".

EUGENICS SOCIETY (at the Royal Society, Burlington House, Piccadilly, London, W.1), at 5 p.m.—Mr. Cecil Binney: "Eugenics and Criminal Law".

INSTITUTION OF CIVIL ENGINEERS (RAILWAY ENGINEERING DIVISION) (at Great George Street, Westminster, London, S.W.1), at 5.30 p.m.—Mr. F. H. D. Page: "Railway Signalling for the Civil Engineer".

INSTITUTION OF ELECTRICAL ENGINEERS (RADIO SECTION) (at Savoy Place, Victoria Embankment, London, W.C.2), at 5.30 p.m.—Discussion on "Frequency Allocation for Long Distance Communication Channels (over 1000 Miles)" (to be opened by Dr. R. L. Smith-Rose).

ROYAL PHOTOGRAPHIC SOCIETY (SCIENTIFIC AND TECHNICAL GROUP) (at 16 Princes Gate, South Kensington, London, S.W.7), at 6.15 p.m.—Mr. P. S. Milne: "Photography and Bee-Keeping Research".

Wednesday, January 17

ROYAL SOCIETY OF ARTS (at John Adam Street, Adelphi, London, W.C.2), at 1.45 p.m.—Mr. Christian Barman: "Design in Modern Transport".

INSTITUTE OF FUEL (MIDLAND SECTION) (at the James Watt Memorial Institute, Birmingham), at 2.30 p.m.—Mr. A. T. Green: "The Properties of Refractory Materials and their Significance to Fuel Economy".

GEOLOGICAL SOCIETY OF LONDON (at Burlington House, Piccadilly, London, W.1), at 3 p.m.—Mr. Fred Wolferson Cope: "Intraformational Contorted Rocks in the Upper Carboniferous of the Southern Pennines".

ROYAL ENTOMOLOGICAL SOCIETY OF LONDON (at 41 Queen's Gate, South Kensington, London, S.W.7), at 3.30 p.m.—Annual Meeting. Dr. E. A. Cockayne: "Some Contributions of Entomology to Genetics" (Presidential Address).

ROYAL STATISTICAL SOCIETY (at the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1), at 5.15 p.m.—Mr. M. G. Kendall: "The Analysis of Oscillatory Time Series".

WOMEN'S ENGINEERING SOCIETY (MANCHESTER BRANCH) (at the Engineers' Club, Albert Square, Manchester 2), at 6.30 p.m.—Mr. G. E. Windeler: "Mechanical Mishaps and Industrial Accidents".

Thursday, January 18

CHEMICAL SOCIETY (at Burlington House, Piccadilly, London, W.1), at 2.30 p.m.—Prof. J. Montearth Robertson: "Diffraction Methods in Modern Structural Chemistry" (Tilden Lecture).

SOCIETY OF CHEMICAL INDUSTRY (PLASTICS GROUP) (at the Royal Institution, 21 Albemarle Street, London, W.1), at 5 p.m.—Dr. L. A. Jordan: "Paint—The Art and the Science" (Jubilee Memorial Lecture).

INSTITUTION OF ELECTRICAL ENGINEERS (at Savoy Place, Victoria Embankment, London, W.C.2), at 5.30 p.m.—Discussion on the Second Report on Education and Training for Engineers dealing with "Part-time Further Education at Technical Colleges, including Courses for those returning from the Services".

IRON AND STEEL INSTITUTE (joint meeting with the STAFFORDSHIRE IRON AND STEEL INSTITUTE) (at the Dudley and Staffordshire Technical College, The Broadway, Dudley), at 7 p.m.—Prof. F. C. Thompson and Dr. L. R. Stanton: "Some Observations on the Austempering and Isothermal Transformation of Steels with special reference to the Production of Martensite".

BRITISH INSTITUTE OF RADIOLOGY (in the Reid-Knox Hall, 32 Welbeck Street, London, W.1), at 8 p.m.—Symposium on "Clinical Photography".

Friday, January 19

INSTITUTION OF ELECTRICAL ENGINEERS (MEASUREMENTS SECTION) (at Savoy Place, Victoria Embankment, London, W.C.2), at 5.30 p.m.—Mr. H. J. Josephs: "The Fixing of Confidence Limits to Measurements".

INSTITUTION OF MECHANICAL ENGINEERS (at Storey's Gate, St. James's Park, London, S.W.1), at 5.30 p.m.—Mr. Antony R. Vickers: "The Engineer and the Nation's Money".

INSTITUTE OF FUEL (SCOTTISH SECTION) (joint meeting with the SOCIETY OF CHEMICAL INDUSTRY) (at the Royal Technical College, Glasgow), at 5.45 p.m.—Prof. D. T. A. Townend: "The New Era in Combustion".

APPOINTMENTS VACANT

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

CIVIL ENGINEER by the Government of Ceylon, for appointment as IRRIGATION ENGINEER—The Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2 (quoting Reference No. E.1030.A) (January 19).

MATHEMATICAL PHYSICIST to join a small research team working on problems connected with welding—The Secretary, The University, Edmund Street, Birmingham 3 (January 20).

PRINCIPAL OF THE BARNSTAPLE SCIENCE, ART AND TECHNICAL SCHOOL—The Secretary for Education, County Education Offices, Castle Street, Exeter (January 20).

ADVISER IN AGRICULTURAL ZOOLOGY—The Acting Registrar, School of Agriculture, University College of North Wales, Bangor (January 20).

LECTURER (full-time) IN ELECTRICAL ENGINEERING—The Principal, Royal Technical College, Peel Park, Salford 5, Lancs. (January 22).

LECTURER IN METALLURGY—The Secretary, The University, Edmund Street, Birmingham 3 (January 30).

EDUCATIONAL PSYCHOLOGIST—The County Medical Officer, Public Health Department, Shire Hall, Nottingham (January 31).

COMMISSIONER OF PUBLIC HEALTH, Perth—The Agent-General for Western Australia, 115 Strand, London, W.C.2 (February 1).

ASSISTANT HYDROGRAPHIC SURVEYORS by the Kenya Government Public Works Department—The Ministry of Labour and National Service, Central (T. and S.) Register, Room 5/17, Sardinia Street, Kingsway, London, W.C.2 (quoting Reference No. E.904.A) (February 12).

SUPERINTENDENT OF THE HAROLD COHEN LIBRARY, and three SUB-LIBRARIANS (two in the Faculty of Arts, and one in the Faculty of Science)—The Registrar, The University, Liverpool (April 26).

ASSISTANT CHEMISTS (two) for Laboratory investigating Colonial raw materials—The Establishment Officer, Imperial Institute, South Kensington, London, S.W.7.

REPORTS and other PUBLICATIONS

(not included in the monthly Books Supplement)

Proceedings of the Royal Society of Edinburgh. Section A (Mathematical and Physical Sciences). Vol. 62, Part 2, No. 14: On Substitutional Equations. By D. E. Rutherford. Pp. 117–126. 1s. 9d. Vol. 62, Part 2, No. 15: Quantum Mechanics of Fields. 2: Electromagnetic Field and Electron Field in Interaction. By Prof. Max Born and Dr. H. W. Peng. Pp. 127–137. 2s. Section B (Biology). Vol. 62, Part 1, No. 10: Mitosis and Cell Differentiation in the Blood. By L. F. La Cour. Pp. 73–85+3 plates. 3s. 3d. Vol. 62, Part 1, No. 11: Some Recent Advances in the Study of the Brain as the Implement of Mind. By Dr. Richard J. A. Berry. Pp. 86–95. 1s. 6d. Vol. 62, Part 1, No. 12: The Histochemical Demonstration of Ribonucleic Acid in Mammalian Liver. By Dr. J. N. Davidson and Dr. C. Waymouth. Pp. 96–98+1 plate. 1s. Vol. 62, Part 1, No. 13: The Appearance in Cross-section of the Hairs of some Carnivores and Rodents. By Dr. J. L. Stoves. Pp. 99–104+3 plates. 2s. 3d. (Edinburgh and London: Gurney and Jackson.) [2812]

Re-educating Adults: an Essay on Adult Religious Education. By Canon R. E. Parsons. Pp. 32. (London: Churches' Committee for Supplementing Religious Education among Men in H.M. Forces.) 1s. 6d. [51]

Ministry of Health. Local Government in England and Wales during the Period of Reconstruction. (Cmd. 6579.) Pp. 20. (London: H.M. Stationery Office.) 4d. net. [51]

Institution of Electrical Engineers. Education and Training for Engineers (Second Report). 2 Report to the Council from the Post-War Planning Committee on Part-Time Further Education at Technical Colleges including Courses for those returning from the Services. Pp. 40. (London: Institution of Electrical Engineers.) [51]