

ones become infected, and the more virulent strains of the virus spread more rapidly than the less virulent ones. The rate of spread is much greater in tomato than potato plants. *Datura stramonium* and tomato, indeed, become infected when grown in soil containing only sap or residues from virus-infected plants. The fungus *Rhizoctonia solani* cannot effect transfer of virus X.

Variations in the properties of virus X have been studied by F. C. Bawden and A. Kleczkowski (*J. Gen. Microbiol.*, 2, No. 2, 173; May 1948). Concentration of the virus extract by high-speed centrifugation or precipitation with acids and salts results in an insoluble form of the virus which is, nevertheless, infective and serologically active. Ribonuclease readily hydrolyses the nucleic acid derived from virus X, but has no action on the active virus.

## FORTHCOMING EVENTS

(Meeting marked with an asterisk \* is open to the public)

Monday, March 28—Wednesday, March 30

CHEMICAL SOCIETY (joint meeting with the CHEMISTRY DIVISION of the ATOMIC ENERGY RESEARCH ESTABLISHMENT, at Rhodes House, South Parks Road, Oxford).—Symposium on "The Chemistry of the Heavy Elements".

Tuesday, March 29

MANCHESTER GEOGRAPHICAL SOCIETY (in the Geographical Hall, St. Mary's Parsonage, Manchester), at 6.30 p.m.—Mr. Wm. A. Singleton: "Impressions of Sweden".

INSTITUTION OF THE RUBBER INDUSTRY, LONDON AND DISTRICT SECTION (at Caxton Hall, Caxton Street, London, S.W.1), at 7 p.m.—Prof. H. W. Melville, F.R.S.: "Redox Polymerization". (Members of the Plastics Group of the Society of Chemical Industry are invited.)

PHARMACEUTICAL SOCIETY, MANCHESTER, SALFORD AND DISTRICT BRANCH (in the Council Chamber, Houldsworth Hall, Manchester), at 7.45 p.m.—Dr. C. Melville, Mr. H. Steinman, Mr. J. B. Lloyd and Mr. H. Burlinson: Papers on "Different Aspects of Pharmacy".

Wednesday, March 30

PHYSICAL SOCIETY, COLOUR GROUP (at the Royal Photographic Society, 16 Princes Gate, London, S.W.7), at 3 p.m.—Ninth Annual General Meeting; at 3.15 p.m.—Discussion on "Photoelectric Spectrophotometers and Tricolorimeters" (to be opened by Dr. T. Vickerstaff)

MANCHESTER LITERARY AND PHILOSOPHICAL SOCIETY, CHEMICAL SECTION (at the Portico Library, Mosley Street, Manchester), at 5.30 p.m.—Dr. Hill: "Chemistry at the Shirley Institute".\*

ROYAL INSTITUTE OF CHEMISTRY, LONDON AND S.E. COUNTIES SECTION (joint meeting with the BRITISH ASSOCIATION OF CHEMISTS and the ASSOCIATION OF SCIENTIFIC WORKERS, at Gas Industries House, 1 Grosvenor Place, London, S.W.1), at 6.15 p.m.—Discussion on "Part-time Education in Chemistry".

Wednesday, March 30—Friday, April 1

INSTITUTE OF METALS (at the Institution of Mechanical Engineers, Storey's Gate, St. James's Park, London, S.W.1, on March 30 and 31, and at 4 Grosvenor Gardens, London, S.W.1, on April 1), at 10 a.m. each day—Annual General Meeting.

Thursday, March 31

CHEMICAL SOCIETY (at Burlington House, Piccadilly, London, W.1), at 2.30 p.m.—108th Annual General Meeting; at 3.30 p.m.—Sir Ian Heilbron, F.R.S.: "Concerning Amino-acids, Peptides and Purines" (Residential Address).

ROYAL SOCIETY (at Burlington House, Piccadilly, London, W.1), at 4.30 p.m.—Scientific Papers.

MINERALOGICAL SOCIETY (at the Geological Society, Burlington House, Piccadilly, London, W.1), at 5 p.m.—Scientific Papers.

TEXTILE INSTITUTE (at 16 St. Mary's Parsonage, Manchester), at 7.15 p.m.—Mr. H. Marsden: "Nylon Yarn Processing in U.S.A.".

Thursday, March 31—Monday, April 4

BRITISH PSYCHOLOGICAL SOCIETY (at Bristol).—Annual General Meeting.

Friday, April 1

CHEMICAL SOCIETY (joint meeting with the CHEMISTRY DIVISION of the ATOMIC ENERGY RESEARCH ESTABLISHMENT, at the Institution of Civil Engineers, Great George Street, London, S.W.1), at 9.30 a.m.—Discussion on "The Use of Radioactive Tracers in Chemistry".

SOCIETY OF PUBLIC ANALYSTS AND OTHER ANALYTICAL CHEMISTS, PHYSICAL METHODS GROUP (in the Chemistry Lecture Theatre, The University, Highfields, Nottingham), at 3.30 p.m.—Discussion on "Electrophoretic Analysis".

INSTITUTION OF MECHANICAL ENGINEERS, APPLIED MECHANICS GROUP (at Storey's Gate, St. James's Park, London, S.W.1), at 6 p.m.—Dr. F. P. Bowden, F.R.S.: "Seizure of Rubbing Surfaces"; Dr. J. R. Bristow: "The Measurement of Kinetic Boundary Friction or the Experimental Investigation of 'Oiliness'".

ROYAL STATISTICAL SOCIETY, LONDON GROUP of the INDUSTRIAL APPLICATIONS SECTION (at the E.L.M.A. Lighting Service Bureau 2 Savoy Hill, Strand, London, W.C.2), at 6 p.m.—Mr. C. Wainwright: "Statistical Principles in Quality Specifications for Plastics".

SOCIETY OF CHEMICAL INDUSTRY, MANCHESTER SECTION (at the Engineers' Club, Albert Square, Manchester), at 6.45 p.m.—Mr. H. V. Potter: "Synthetic Fibres" (Jubilee Memorial Lecture).

ROYAL INSTITUTION (at 21 Albemarle Street, London, W.1), at 9 p.m.—Prof. S. Tolansky: "The Examination of Crystal and Metal Surfaces using Interferometry".

## APPOINTMENTS VACANT

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

PHYSICAL CHEMISTS (Scientific Officer grade) at a Ministry of Supply Research and Development Establishment near London, for duties in (a) high temperature refractories, (b) crystallography and practical microscopy, (c) spectrography, and (d) plant development—The Ministry of Labour and National Service, Technical and Scientific Register (K), York House, Kingsway, London, W.C.2, quoting F.1025/48A (April 2).

SENIOR SCIENTIFIC OFFICERS and SCIENTIFIC OFFICERS (with a good honours degree, or equivalent, in physics, and an interest in photography from high-speed aircraft and in air survey photography) at the Royal Aircraft Establishment, Farnborough, Hants—The Ministry of Labour and National Service, Technical and Scientific Register (K), York House, Kingsway, London, W.C.2, quoting A.43/49A (April 2).

RESPONSIBLE LECTURER IN MECHANICAL ENGINEERING, and a LECTURER IN MATHEMATICS—The Principal, Royal Aircraft Establishment Technical College, Farnborough, Hants (April 2).

PHYSICISTS (Senior Scientific Officer and Scientific Officer grades) in Ministry of Supply Research and Development Establishments in South England and South Midlands—The Ministry of Labour and National Service, Technical and Scientific Register (K), York House, Kingsway, London, W.C.2, quoting A.42/49A (April 2).

SENIOR EXPERIMENTAL OFFICER in Ministry of Supply Headquarters, London, for the co-ordination of thermionic valve requirements and supervision of an information service on valves for Government Departments and associated organisations—The Ministry of Labour and National Service, Technical and Scientific Register (K), York House, Kingsway, London, W.C.2, quoting D.69/49A (April 2).

LECTURER (qualified to teach up to B.Sc. general degree standard in Mathematics) IN THE PHYSICS AND MATHEMATICS DEPARTMENT—The Clerk to the Governors, South-East Essex Technical College and School of Art, Longbridge Road, Dagenham (April 2).

SENIOR ASSISTANT IN PHYSICS at the Bradford Technical College—The Director of Education, Town Hall, Bradford (April 2).

VENTILATION ENGINEER in the Production Department at the Board's Headquarters in London—The National Coal Board, Establishments (General) Branch, Hobart House, Grosvenor Place, London, S.W.1, endorsed TT/126 (April 4).

LECTURER (Grade IIb) IN INDUSTRIAL METALLURGY—The Secretary, The University, Birmingham 3 (April 9).

ENGINEERS or PHYSICISTS IN THE HYDRAULICS RESEARCH ORGANIZATION (Department of Scientific and Industrial Research) for work in connexion with the design and development of new instruments for hydraulics laboratory and oceanographic research—The Ministry of Labour and National Service, Technical and Scientific Register (K), York House, Kingsway, London, W.C.2, quoting A.51/49A (April 9).

PRINCIPAL SCIENTIFIC OFFICER (Ref. F.134/49A) to be responsible, under the Superintendent, for research on chemical, physical and engineering problems of flax cultivation and processing, a SENIOR SCIENTIFIC OFFICER or SCIENTIFIC OFFICER (Ref. A.36/49A) for research in connexion with fibre grading and testing, etc., a SCIENTIFIC OFFICER (Ref. F.135/49A) to undertake research into some aspects of chemical and biological retting, etc., a SENIOR EXPERIMENTAL OFFICER or EXPERIMENTAL OFFICER (Ref. F.136/49A) to take charge of the chemical testing and analytical section, and an EXPERIMENTAL OFFICER or ASSISTANT EXPERIMENTAL OFFICER (Ref. A.37/49A) to take charge of the technical library and information section, at the Norfolk Flax Establishment, King's Lynn—The Ministry of Labour and National Service, Technical and Scientific Register (K), York House, Kingsway, London, W.C.2, quoting the appropriate Ref. No. (April 9).

DIRECTOR OF THE MARINE BIOLOGICAL STATION which is being established at Bangor to develop the facilities for the study of Marine Biology within the University of Wales—The Secretary and Registrar, University College of North Wales, Bangor (April 9).

LECTURER IN AGRICULTURAL ZOOLOGY—The Secretary of University Court, The University, Glasgow, W.2 (April 12).

SENIOR BIOCHEMIST to direct the research activities of a cell metabolism unit at the Australian Institute of Anatomy, Canberra—The Chief Medical Officer, Australia House, Strand, London, W.C.2 (April 14).

LECTURER IN PHARMACOLOGY—Prof. J. H. Gaddum, Pharmacology Department, The University, Edinburgh (April 15).

ASSISTANT IN THE DEPARTMENT OF NATURAL PHILOSOPHY, University College, Dundee—The Secretary, The University, St. Andrews (April 15).

LECTURER (Grade III) IN GEOGRAPHY—The Registrar, Queen Mary College, Mile End Road, London, E.1 (April 22).

CHEMIST to assist in research with radioactive isotopes—The Secretary and House Governor, Royal Cancer Hospital, Fulham Road, London, S.W.3 (April 22).