

Since its creation in February 1948, the Institute has undertaken a number of projects. It organised the annual meetings for eleven biological societies which met in Washington during September 1948. It appointed a Committee on Selective Service, which became the Panel of Biology of a committee advisory to General Hershey, director of selective service. This panel has worked with similar panels in other fields to develop a comprehensive plan for selective service which will utilize scientific and technical manpower to the greatest advantage. Recognition and utilization of this Committee marks a definite step forward for biology, this being the first time that biology has been officially recognized in connexion with man-power problems in the United States. The Institute has established a roster of individual biologists who are members of the constituent societies; more than 10,000 individuals are at present listed. A study of publication costs and of possible ways of aiding biological publication is now going on. The Institute is endeavouring to secure increased financial assistance for the American Type Culture Collection, and is developing a plan for a broader and more secure foundation of support for this essential organisation. The publication of a hand-book of biological data is being initiated. The Institute is working with the American Association for the Advancement of Science in the organisation of the meetings of the various biological societies which are to be held in New York during December 1949, and is studying the whole question as to times and meeting-places for future joint meetings of biological societies. A number of other projects are planned for the immediate future and will be undertaken as soon as possible.

The American Institute of Biological Sciences has thus been able to make a distinct contribution to the progress of biology in the few months of its existence.

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TETRAETHYL PYROPHOSPHATE AS AN INSECTICIDE

THE shortage of nicotine for use as an insecticide has stimulated the search for suitable substitutes. One of the organic phosphorus insecticides called hexaethyltetraphosphate (H.E.T.P.) seemed to fulfil many of the requirements; but more recent research has indicated that tetraethyl pyrophosphate (T.E.P.P.) is responsible for at least the major part of the insecticidal activity of hexaethyltetraphosphate, and that an insecticide containing a high percentage of this material was desirable. Messrs. Albright and Wilson have now available an insecticide containing 40 per cent tetraethyl pyrophosphate as compared with the 20 per cent contained in so-called hexaethyltetraphosphate. They are issuing a brochure describing the properties of this material and its use as an insecticide.

Tetraethyl pyrophosphate is a mobile liquid, miscible with water and most common organic solvents; it is not, however, freely miscible with petroleum ether or other paraffin hydrocarbons. In the absence of moisture it is a stable compound, but it hydrolyses rapidly in the presence of water. It is hygroscopic. It is said to be compatible with a variety of insecticides and fungicides; but it should not be used with alkaline materials. It may be applied as a spray or as an aerosol. In the concentrations used it exhibits very little phytotoxicity.

It lacks the fumigant effect of nicotine. Tetraethyl pyrophosphate is very toxic to warm-blooded animals, and the concentrates must be handled with great care. The products of hydrolysis are said to be harmless, and it would appear that no toxic residues should be present forty-eight hours after spraying, although it seems desirable that a safety margin should be allowed.

Its chief use in practice would appear to be for the control of aphids and thrips, although it may be found useful for other pests; for example, it appears to be effective against the active stages of red spider, although it seems to have little or no ovicidal effect. Another organic phosphorus compound, 0.0.-diethyl 0.-*p*-nitrophenyl thiophosphate, is probably at least as effective an insecticide as tetraethyl pyrophosphate against most of the insect species on which it has been tested, and much more effective against some species. It also acts as an ovicide. This compound, therefore, may prove a serious competitor with tetraethyl pyrophosphate, but it has the disadvantage that, not only is it toxic to warm-blooded animals, but also it is a stable compound and therefore liable to leave dangerous residues. In some circumstances, therefore, tetraethyl pyrophosphate may be the preferable insecticide.

C. POTTER

FORTHCOMING EVENTS ^{26f}

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

Monday, March 7

ROYAL GEOGRAPHICAL SOCIETY (at Kensington Gore, London, S.W.7), at 5.30 p.m.—“Explorations in Western Mexico” (Kodachrome films with commentary by Dr. Telford H. Work).

INSTITUTION OF ELECTRICAL ENGINEERS, SOUTH MIDLAND CENTRE (at the James Watt Memorial Institute, Great Charles Street, Birmingham) (at 6 p.m.)—Mr. H. E. Dance: “Visual Methods in Engineering Teaching”. To be repeated on Thursday, March 17, at Savoy Place, Victoria Embankment, London, W.C.2, at 5.30 p.m., and on Tuesday, April 5, at the Engineers' Club, Albert Square, Manchester, at 6.15 p.m.)

SOCIETY OF CHEMICAL INDUSTRY (at the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1), at 6.30 p.m.—Mr. T. Vickerstaff: “The Physical Chemistry of Dyeing”.

ROYAL INSTITUTE OF CHEMISTRY, LONDON AND S.E. COUNTIES SOCIETY (joint meeting with the WOOLWICH POLYTECHNIC SCIENTIFIC SOCIETY, at Woolwich Polytechnic, Woolwich, London, S.E.18), at 7.30 p.m.—Dr. G. E. Turfitt: “Science in Criminal Investigations”.

Tuesday, March 8

BRITISH PSYCHOLOGICAL SOCIETY, INDUSTRIAL SECTION (in Room 105, London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1), at 1 p.m.—Annual General Meeting; at 1.10 p.m.—Colonel B. Ungerson: “Some Deficiencies in Present-day Industrial Psychology”.

UNIVERSITY OF LONDON (in the Anatomy Theatre, University College, Gower Street, London, W.C.1), at 1.15 p.m.—Prof. Daryll Forde: “The Human Factor behind Food from Africa”.*

ROYAL ANTHROPOLOGICAL INSTITUTE (at 21 Bedford Square, London, W.C.1), at 5 p.m.—Prof. W. C. Osman Hill: “Man's Relation to the Apes”.

ZOOLOGICAL SOCIETY OF LONDON (at the Zoological Gardens, Regent's Park, London, N.W.8), at 5 p.m.—Scientific Papers.

INSTITUTION OF CHEMICAL ENGINEERS (at the Geological Society, Burlington House, Piccadilly, London, W.1), at 5.30 p.m.—Mr. J. Levland: “The Application of Vacuum to Industrial Chemical Processes”; Mr. G. Arrowsmith: “The Production of Vacuum for Industrial Chemical Processes”.

UNIVERSITY OF LONDON (in the Anatomy Theatre, University College, Gower Street, London, W.C.1), at 5.30 p.m.—Prof. G. Delépine (Lille): “Comparative Stratigraphy of the Carboniferous Marine Formations in N.W. Europe and Mediterranean Area”. (Special University Lectures).* (Further Lecture on March 10.)

UNIVERSITY OF LONDON (at the Institute of Archaeology, Inner Circle, Regent's Park, London, N.W.1), at 5.30 p.m.—Dr. J. W. Jackson: “Domesticated Animals from Archaeological Sites”.*

ILLUMINATING ENGINEERING SOCIETY (at the Lighting Service Bureau, 2 Savoy Hill, London, W.C.2), at 6 p.m.—Mr. W. Harrison: “The Colour of Fluorescent Lamps”.

MANCHESTER GEOGRAPHICAL SOCIETY (in the Geographical Hall, St. Mary's Parsonage, Manchester), at 6.30 p.m.—Mr. Harry Vickers: “South German Cities”.

INSTITUTION OF THE RUBBER INDUSTRY, BURTON-ON-TRENT SECTION (at the Education Offices, Guild Street, Burton-on-Trent), at 7 p.m.—Mr. H. Willshaw: “Machinery Requirements for the Rubber Industry”.