

from fermenting sansa, is described. V. PUNTONI: Development of *Anopheles* larvae in the waters of sewers. Contrary to current opinion, these larvae grow well in sewage, the organic suspensions of which furnish them with suitable nutriment. V. RIVERA: Further considerations on the biological action of metals at a distance. This action cannot be regarded as due to either the vapour pressure of the metals, or the very slight reduction of the penetrating radiation inside metallic containers, or the radioactivity of the metals. It is assumed that the effects observed are determined by secondary phenomena, including ionisation of the air, produced by the penetrating radiation. G. LUCHETTI: Contributions to the knowledge of the causes of 'intoxication' of soil. This is a true 'intoxication', caused by bacterial, fungal and plant metabolism.

## VIENNA

Academy of Sciences, June 14. MARIETTA BLAU and HERTHA WAMBACHER: Physical and chemical investigations on the photographic detection of H-rays. Experiments with pinakryptol-yellow show that the desensitising power of a dye depends on the nature of the solvent in which it is used. It varies also with the oxygen content of the surroundings, the dye apparently acting as a catalyst of the oxidation, by atmospheric oxygen, of the silver formed photochemically. HANS PETTERSSON: Ultra-violet spectrum of radium emanation. By means of a special experimental arrangement, a number of new lines in this spectrum have been mapped. FRIEDRICH BÖCK, GUNTHER LOCK and KARL SCHMIDT: Perkin's synthesis of cinnamic acid. The effects of the temperature and time of the reaction, of the proportions between the three reagents, and of various substituent groups on the yield of product obtained by this synthesis, are studied. The view that benzylidene diacetate is an intermediate product in the reaction is shown to be erroneous. WILHELM SCHMIDT and ERNST BREZINA: Experiments on the action of air-suction arrangements in works. The results of small-scale tests bring out various important points, for example, the inadequacy—in almost all cases—of a hood over an open vessel when the vapour emitted is somewhat heavier or cooler than the air. The necessity of testing the air at a number of points in the room is emphasised. K. W. F. KOHLRAUSCH and A. PONGRATZ: Studies on the Raman effect (33). The Raman spectrum of organic compounds—poly-substituted benzenes (34). Benzoyl,  $\alpha$ -toluyl and cinnamoyl compounds. The effect of a benzene nucleus on the extent and intensity of the carbonyl frequency and on the frequency of the nitrile group is similar to that of a conjugated C : C double linking. The order of the substituents of the CO group according to their constitutive influence on the CO-frequency is the same as that of the dipole moments. O. PAULSEN: Raman observations on dichloroethylene. Results are given which indicate that it is scarcely justifiable to speak of dichloroethylene as a definite equilibrium mixture. ROBERT WILLHEIM: Carbohydrate metabolism of carcinoma. The co-ferment peculiar to the malignant tumours or a substrate accompanying it causes the characteristic anomalies of the carbohydrate metabolism, and presumably the spreading of this co-ferment into the rest of the organism is responsible for the general disturbance of such metabolism. HANS HELLER and FRITZ F. URBAN: Neutralisation of the poisonous action of pituitrin in the organism. Experiments *in vitro* show

that, if the specific adsorptive power of blood towards pituitrin is taken as unity, that of skeletal muscle and brain is 2-4, that of kidneys 10, and that of the liver 100-200. FRIEDRICH MORTON: Results of a journey to Abyssinia, Egypt and the Quarnero Islands in 1931-32. The plant-geographical relationships in these regions were investigated. EDGAR SCHALLY and FERDINAND NAGL: Observation of 'streaking' in chemical investigations (6). Streaking observed when liquids of similar refractive power are mixed. JULIUS PIA: Comparison of the anise Diplopore flora of Bosnia with that of southern Dalmatia. VICTOR F. HESS, H. TH. GRAZIADEI and R. STEINMAURER: Investigations on the changes in intensity of the cosmic ultra-violet radiation on the Hafelekar (2,300 metres). HANS MOTZ: Investigation of rubber by electron deflection.

## Forthcoming Events

BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE  
(ABERDEEN MEETING)

Monday, September 10

- At 10 a.m.—Capt. T. A. Joyce: "The Origin and Uses of Yerba Maté" (Presidential Address to Section H). Prof. J. A. S. Watson: "Scientific Progress and Economic Planning in Relation to Rural Industry and Country Life" (Presidential Address to Section M). Prof. H. E. Roaf: "Normal and Abnormal Colour Vision" (Presidential Address to Section I).  
At 8.30 p.m.—Prof. W. L. Bragg: "The Exploration of the Mineral World by X-Rays" (Evening Discourse in MacRobert Hall, Gordon's Colleges).

IRON AND STEEL INSTITUTE, September 10-14. Annual meeting to be held in Belgium and Luxemburg.

## Official Publications Received

## GREAT BRITAIN AND IRELAND

Ministry of Agriculture and Fisheries. Agricultural Statistics, 1933. Vol. 68, Part 1: Report on the Acreage and Production of Crops and Number of Live Stock in England and Wales; with Summaries for Great Britain and the United Kingdom. Pp. 91+3 plates. (London: H.M. Stationery Office.) 1s. 6d. net.  
The North of Scotland College of Agriculture. Calendar, Session 1934-1935. Pp. viii+124. (Aberdeen.)  
London School of Hygiene and Tropical Medicine. Classified Catalogue of Books in the Library, including Departmental Libraries. Class B: Natural Science. Pp. iii+31. (London.) Free.  
Department of Scientific and Industrial Research. Report of the Food Investigation Board for the Year 1933. Pp. ix+248. (London: H.M. Stationery Office.) 4s. net.

## OTHER COUNTRIES

Punjab Irrigation Research Institute: Research Publications. Vol. 2, No. 3: A Study of the Flow of Water under Works on Sand Foundations by means of Models. By Dr. E. McKenzie Taylor and Harbans Lal Uppal. Pp. 28+7 plates. 4 annas; 5d. Vol. 2, No. 4: A Study of the Flow of Water under Works on Sand Foundations by means of Models, Part 2. By Dr. E. McKenzie Taylor and Harbans Lal Uppal. Pp. 5+3 plates. 3 annas; 5d. Vol. 2, No. 5: An Investigation of the Pressures on Works on Sand Foundations, I. By Dr. E. McKenzie Taylor and Harbans Lal Uppal. Pp. 14+8 plates. 1 rupee; 1s. 6d. Vol. 2, No. 6: An Investigation of the Flow of Water under Khanki Weir and the Pressures on the Floor. By Dr. E. McKenzie Taylor and Harbans Lal Uppal. Pp. 34+18 plates. 1 rupee; 1s. 6d. Vol. 4, No. 5: The Relation between Exchangeable Sodium and Crop Yield in Punjab Soils and a New Method of Characterising Alkali Soils. By Dr. Amar Nath Puri. Pp. 4+1 plate. 2 annas; 3d. Vol. 4, No. 6: A Simple Method for Determining the Reaction and Titration Curves of Soils. By Balmokand Anand and Dr. Amar Nath Puri. Pp. 4+3 plates. 2 annas; 3d. Vol. 5, No. 2: The Transmission Coefficient of Water in Natural Silts. By Dr. V. I. Vaidhianathan and Hans Raj Luthra. Pp. 12+3 plates. 5 annas; 7d.

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