

constant of this catalysis at 25° is 1.13, those for HDO<sub>2</sub> and H<sub>2</sub>O<sub>2</sub> being 1.19 and 1.57 respectively. FRANZ KNOLL: The Bruns-Hermite series in statistics.

February 7. LEOPOLD SCHMID and SIEGMUND MARQUILIES: Gossypol. RUDOLF TOTH: Stratigraphical observations on the trias chalk of the Hohen Wand region in Lower Austria. VICTOR F. HESS: Criticism of Arthur Wagner's paper entitled "Critical Remarks on the Daily Course of Cosmic Ultra-radiation". HANS PRZIBRAM: Lower males of the stag-beetle, *Lucanus cervus*, L. as heat-forms. LEONORE BRECHER: *Chrysalis* coloration of the cabbage butterfly, *Pieris brassicae*, L. and of *Vanessa Jo* and *V. urticae*. H. BOERSCH: Determination of the structure of simple molecules by electron interference. E. BARONI and A. FINK: Investigations on the concentration of D<sub>2</sub>O in natural ice. F. WERNER: Reptiles of the [islands of the] Aegean Sea.

February 14. H. MANN: A law of normal divisors. KARL MAYRHOFER: Partial fraction series. FRITZ PRENN: Dragon-fly fauna of the Tyrol (biology of *Somatochlora arctica*, Zett. and *S. alpestris*, Selys). RICHARD WEISS and JOSEF EBERT: Conversion of dialkylidenecyclohexanes into the isomeric dialkylphenols. (1) Dibenzylidenecyclohexanone to 2:5-dibenzylphenol.

February 21. HERBERT HABERLANDT, BERTA KARLIK and KARL PRZIBRAM: Fluorescence of fluorite. (3) Line fluorescence spectrum. The spectra for different yttrifluorites and fluorites exhibit general agreement but individual divergences. One yttrifluorite showed the blue europium bands, and with a fluorite from Weardale the Eu lines were strong in comparison with those of Tb. With fluorites from Eastern Turkestan and Cornwall, the lines were intensified by radium radiation, the presence of very short-lived centres being indicated. WOLFGANG HOFF and FRANZ URBACH: Attainment of a photochemical equilibrium with silver bromide. ALFONS KLEMENC, RAOUL WECHSBERG and GEORG WAGNER: Gas-analysis methods for determining carbon suboxide in presence of carbon dioxide, carbon monoxide and oxygen. Various methods, especially the use of fractional crystallisation at temperatures of about -100° C., were employed for separating these gases. F. ANGEL and OTTO FRIEDRICH: Form of magnetite. OTMAR ECKEL: Radiation research in certain Austrian lakes. FRITZ LIEBEN and STEPHAN MOLNAR: Behaviour of the combination glycocoll-alcohol towards yeast which has been shaken with oxygen. The amount of glycocoll taken up by the yeast is increased by the presence of alcohol, while the uptake of alcohol is checked when glycocoll is present.

### Forthcoming Events

[Meetings marked with an asterisk are open to the public.]

Saturday, April 27

ROTHAMSTED EXPERIMENTAL STATION.—Conference on the "Swarming of Bees and the Practical Means of Controlling it".

Sunday, April 28

BRITISH MUSEUM (NATURAL HISTORY), at 3 and 4.30.—M. A. Phillips: "Mammals".\*

Monday, April 29

BRITISH MUSEUM (NATURAL HISTORY), at 11.30.—G. J. Arrow: "Horned Beetles".\*

VICTORIA INSTITUTE, at 4.30.—George H. Kimble: "The Expansion of the Habitable Earth in Old Testament Times".

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Prof. G. Barbour: "Floods and Flood-Control in China and America".

Tuesday, April 30

ROYAL PHOTOGRAPHIC SOCIETY (SCIENTIFIC AND TECHNICAL GROUP), at 7.—Dr. Oliver C. de C. Ellis: "The Afterglow in Gaseous Explosions".

Thursday, May 2

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—Sir William Bragg: "The Molecular Structure of Dielectrics" (Kelvin Lecture).

Friday, May 3

ROYAL INSTITUTION, at 9.—Sir William Larke: "Iron and Steel".

IRON AND STEEL INSTITUTE, May 2-3. Symposium on the "Welding of Iron and Steel" to be held at the Institution of Civil Engineers, Great George Street, Westminster, S.W.1.

### Official Publications Received

#### GREAT BRITAIN AND IRELAND

World Power Conference. Annual Report, 1934. Pp. 18. (London: World Power Conference.)

Forestry Commission. Utilization Series, No. 2: Report on the Demand for Timber in Coal-Mining in England and Wales. Pp. vi+77. (London: H.M. Stationery Office.) 1s. 3d. net.

Report of the United Kingdom Sugar Industry Inquiry Committee. (Cmd. 4871.) Pp. iv+123. (London: H.M. Stationery Office.) 2s. net.

The Archaeology of Rochford Hundred and South-East Essex. By William Pollitt. (Museum Handbooks, No. 7.) Pp. 59+22 plates. (Southend-on-Sea: Public Library and Museum Committee.) 6d.

University of Oxford: Committee for Advanced Studies. Abstracts of Dissertations for the Degree of Doctor of Philosophy. Vol. 7 (Dissertations accepted during 1934). Pp. iv+129. (Oxford: Clarendon Press; London: Oxford University Press.) 3s. net.

#### OTHER COUNTRIES

Ingeniørvidenskabelige Skrifter. A. Nr. 38: Radiation from a Vertical Antenna over Flat Perfectly Conducting Earth. By Dr. P. O. Pedersen. Pp. 50. 6.00 kr. B. Nr. 12: Miscellaneous Papers. By Dr. P. O. Pedersen. Pp. 105. 6.00 kr. (Copenhagen: G. E. C. Gad.)

Department of Agriculture: Straits Settlements and Federated Malay States. Scientific Series, No. 16: The Toxic Value of *Derris* Spp. By N. C. E. Miller. Pp. ii+44+2 plates. (Kuala Lumpur: Department of Agriculture.) 50 cents.

Commonwealth of Australia: Council for Scientific and Industrial Research. Pamphlet No. 52: Systematic Entomology—Contribution 1: 1. Notes on the Genus *Hexamera* B. and B. (Dipt. Tachin.), by A. L. Tonnoir; 2. Australian *Hamitermes* (Isoptera), with Descriptions of New Species and hitherto Undescribed Castes, by G. F. Hill. Pp. 31+3 plates. (Melbourne: Government Printer.)

Indian Forest Records. Vol. 20, Part 13: Results of Experiments on the Kiln Drying of Wood with Ozonized Air. By Dr. S. N. Kapur. Pp. ii+20. (Delhi: Manager of Publications.) 8 annas; 10d.

British Guiana: Second Legislative Council, Fourth Session, 1933: Geological Survey Department. The Kaburi District: 1933 Progress Report. By Dr. D. R. Grantham, S. Bracewell and Dr. G. J. Williams. Pp. 22+2 plates. (Georgetown: Government Printers.)

Mémoires de la Société de Physique et d'Histoire Naturelle de Genève. Vol. 41, Fasc. 3: Études sur la partie occidentale du Lac de Genève, 2: Histoire malacologique du Lac de Genève. Par Jules Favre. Pp. 295-414+plate 13. (Genève et Bâle: Geogr. et Cie.) 10 francs.

Ochrona Przyrody: Organ Państwowej Rady Ochrony Przyrody. Rocznik 14. Pp. iv+235+4 plates. (Kraków: Państwowej Rady Ochrony Przyrody.)

Proceedings of the American Academy of Arts and Sciences. Vol. 70, No. 1: The Melting Curves and Compressibilities of Nitrogen and Argon. By P. W. Bridgman. Pp. 32. 65 cents. Vol. 70, No. 2: Observations on the Behavior of Animals during the Total Solar Eclipse of August 31, 1932. By William Morton Wheeler, Clinton V. MacCoy, Ludlow Griscom, Glover M. Allen and Harold J. Coolidge, Jr. Pp. 33-70. 75 cents. (Boston, Mass.: American Academy of Arts and Sciences.)

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 117: On the Motion of High-pressure Powder Gases and Compression Waves in the neighbourhood of the Muzzle of a Rifle. By Kwan-ichi Terazawa, Mitsuo Tamano and Sin-iti Hattori. Pp. 439-492+9 plates. (Tôkyô: Koseikai Publishing Office.) 75 sen.