

Syntheses of 4·4-diacenaphthylmethane, of 4·4-diacenaphthylketone and their oxidation derivatives. **ST. KREUTZ**: The vicinal faces of topaz. **J. S. RUSZKOWSKI**: Studies on the evolutive cycle and on the structure of marine cestodes. The evolutive cycle of *Grillotia erinaceus*. **J. WALAS**: The plant associations of 'Babia Góra'.

Dec. 5. **ST. BANACH**: Lacunar series. **J. SCHREIER**: The plane sections of non-convex surfaces. **M. JEZEWSKI**: Application of the resonance method to the determination of the dielectric constants of aqueous electrolytes. The method of resonance is liable to numerous errors. The author analyses these sources of error and shows how they can be eliminated. **K. DZIEWONSKI**, **M. M. DOMINKOWNA**, **L. GALUSZKOWNA** and **WL. MUZ**: Studies in the fluorene series. Syntheses of hydrocarbons and ketones derived from 2-benzylfluorene and 2-benzoylfluorene. **WL. SZAFER**: A case of anomalous anatomical structure of a pine (*Pinus sylvestris*). **F. ROGAZINSKI** and **Z. GLOWCZYNSKI**: Experimental rickets. Rickets and weakness of the limbs in chicks. **A. MOSZYNSKI**: Description of a new species of oligochaete, *Fridericia Stephensoni*.

Forthcoming Events

Saturday, March 25

ROYAL INSTITUTION, at 3.—Developments in Cinematography: A Display of Films, (2) Colour Films.

Monday, March 27

BRITISH SCIENCE GUILD, at 2.30.—Symposium on "The Utilization of Coal". Speakers: Capt. B. Acworth, S. Lacey, Rear-Admiral W. Scott Hill and A. C. Hardy.

ROYAL GEOGRAPHICAL SOCIETY, at 5.30.—The Mount Everest Film of 1922 (Climbing Sections): also an early film on Borneo by Carl Lumnholz.

Tuesday, March 28

ROYAL AERONAUTICAL SOCIETY, at 6.30.—Annual General Meeting.

Wednesday, March 29

CHEMICAL SOCIETY, at 5.30.—(Faraday Lecture at the Royal Institution, Albemarle Street, W.1).—Prof. P. Debye: "The Relations between Stereochemistry and Physics".

Thursday, March 30

CHEMICAL SOCIETY, at 4.—Annual General Meeting. Presidential Address: "The Present Position and the Future of the Chemical Society".

Friday, March 31

ROYAL ASTRONOMICAL SOCIETY, at 4.30.—Geophysical discussion on "Wave Patterns" to be opened by Sir Gilbert Walker, followed by Dr. Rosenhead, Dr. Vaughan Cornish and Dr. Harold Jeffreys.

INSTITUTION OF MECHANICAL ENGINEERS, at 7.—(Informal Meeting: Lantern Lecture).—L. Ennis: "The Sydney Harbour Bridge".

ROYAL INSTITUTION, at 9.—Sir Frederick Keeble: "The Nitrogen Hunger of the World".

Saturday, April 1

ROYAL INSTITUTION, at 3.—Developments in Cinematography: A Display of Films, (3) Films in Relation to Aeronautical Research.

Official Publications Received

GREAT BRITAIN AND IRELAND

National Laboratory of Psychological Research. Bulletin 4: An Account of some Further Experiments with Rudi Schneider; a Minute-by-Minute Record of 27 Séances. By Harry Price. Pp. 199+23 plates. (London: National Laboratory of Psychological Research.) 10s. net.

The National Institute of Agricultural Botany. Thirteenth Report and Accounts, 1931-32. Pp. 20. (Cambridge.)

The Economic Proceedings of the Royal Dublin Society. Vol. 2, No. 31: Grass Silage. By C. Boyle and J. J. Ryan. Pp. 515-528. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.) 6d.

Proceedings of the Liverpool Geological Society. Session the Seventy-third, 1931-1932. Edited by D. A. Allan. Part 1, Vol. 16. Pp. xii+61. (Liverpool.)

Journal of the Royal Statistical Society. Vol. 96, Part 1. Pp. viii+182. (London: Royal Statistical Society.) 7s. 6d.

Navy (Health). Statistical Report of the Health of the Navy for the Year 1931. Pp. 148. (London: H.M. Stationery Office.) 2s. 6d. net.

The Quarterly Journal of the Geological Society of London. Vol. 89, Part 1, No. 353, February 28th. Pp. 86. (London: Longmans, Green and Co., Ltd.) 7s. 6d.

Economic Advisory Council. Severn Barrage Committee Report. Pp. 28. (London: H.M. Stationery Office.) 6d. net.

OTHER COUNTRIES

Annual Report of the Indian Central Cotton Committee, Bombay, for the Year ending August 31, 1932. Pp. ii+136. (Bombay.) 2 rupees. The Indian Lac Research Institute. Bulletin No. 12: Shellac Drying Oil Combinations. By Dr. R. W. Aldis. Pp. 4. (Nankum, Ranchi.) 1.8 rupees.

Report of the Aeronautical Research Institute, Tôkyô Imperial University. No. 90: On the Flow of Water through Tubes. By Daizo Nukiyama. Pp. 233-290+6 plates. 65 sen. No. 91: A New Method of Thickness-Measurement of Metal Films. By Sin Tanaka. Pp. 291-306+plates 7-9. 25 sen. (Tôkyô: Koseikai Publishing House.)

Asiatic Society of Bengal. Annual Report for 1932. Pp. 34. (Calcutta: Asiatic Society of Bengal.)

Department of Agriculture, Sierra Leone. Soil Survey of Sierra Leone. By Dr. F. J. Martin and H. C. Doyne. Pp. 35. (Njala.)

Koninklijk Nederlandsch Meteorologisch Instituut. No. 106A: Ergebnisse Aerologischer Beobachtungen. 20, 1931. Pp. iv+42. 2.50 f. No. 108: Seismische Registrierungen in De Bilt. 18, 1930. Pp. vii+66. 1.00 f. (De Bilt.)

Bernice P. Bishop Museum. Bulletin 95: Kepellino's Traditions of Hawaii. Edited by Martha Warren Beckwith. Pp. 206. Bulletin 96: Geology of Eua, Tonga. By J. Edward Hoffmeister; includes Petrography, by Harold L. Alling; Foraminifera, by G. Leslie Whipple. Pp. 93+22 plates. Bulletin 97: Sexually Mature Larval Hemirhamphids from the Hawaiian Islands. By Otto Schindler. Pp. 28+10 plates. Pacific Entomological Survey, Publication 1: Marquesan Insects, I. Pp. iv+244. (Honolulu.)

Union of South Africa: Fisheries and Marine Biological Survey. Reports Nos. 8 and 9 for the Period July 1929-December 1931. By Dr. Cecil von Bonde. Pp. 28+42+30+128+34 plates. (Pretoria: Government Printer.)

Union of South Africa: Department of Agriculture. Science Bulletin No. 110: Soil Fertility Problems in Natal. By C. O. Williams. (Chemistry Series No. 124.) Pp. 39. (Pretoria: Government Printer.) 3d.

Ibero-Americana 4: A Spanish-Mexican Peasant Community, Arandas in Jalisco, Mexico. By Paul S. Taylor. Pp. vi+94 (8 plates). (Berkeley, Calif.: University of California Press; London: Cambridge University Press.) 1.50 dollars.

Science Reports of the Tokyo Bunrika Daigaku, Section A. No. 22: Cryoscopic Studies on the Transition Points of the Compounds of Organic Solvents with Salts. 2. By Hazime Oosaka. Pp. 241-249. 15 sen. No. 23: A Theory of the Spin of Electron. By Seisaku Shimasaki. Pp. 251-273. 30 sen. (Tokyo: Maruzen Co., Ltd.)

Instituts scientifiques de Buitenzorg: "'s Lands Plantentuin". Treubia: recueil de travaux zoologiques, hydrobiologiques et océanographiques. Vol. 14, Livraison 1, Décembre. Pp. 152. (Buitenzorg: Archipel Drukkerij.)

Collection des travaux chimiques de Tchecoslovaquie. Rédigée et publiée par E. Votoček et J. Heyrovský. Année 5, No. 2, Février. Pp. 49-92. (Prague: Regia Societas Scientiarum Bohemica.)

U.S. Department of Agriculture. Circular No. 255: Observations on the Mexican Fruit Fly and some related Species in Cuernavaca, Mexico, in 1928 and 1929. By M. McPhail and C. L. Bliss. Pp. 24. (Washington, D.C.: Government Printing Office.) 5 cents.

Bulletin of the American Museum of Natural History. Vol. 59, Art. 9: New Remains of Trilophodont-Tetrahelodont Mastodons. By Childs Frick. Pp. 505-652. (New York City.)

U.S. Department of Commerce: Bureau of Standards. Handbook No. 17: Code for Protection against Lightning, Parts 1, 2 and 3. Pp. x+93+2 plates. 15 cents. Research Paper No. 502: Characteristic Equations of Vacuum and Gas-filled Tungsten-Filament Lamps. By L. E. Barbrow and J. Franklin Meyer. Pp. 721-732. 5 cents. (Washington, D.C.: Government Printing Office.)

Bulletin of the Bingham Oceanographic Collection. Vol. 3, Art. 5: Scientific Results of the Third Oceanographic Expedition of the *Poroneo*, 1927—Deep Sea Eels, exclusive of Larval Forms. By Albert Eide Parr. Pp. 41. Vol. 4, Art. 3: A Geographic-Ecological Analysis of the Seasonal Changes in Temperature Conditions in Shallow Water along the Atlantic Coast of the United States. By A. E. Parr. Pp. 90. Vol. 4, Art. 4: A Contribution to the Study of the Natural Food-Cycle in Aquatic Environments; with particular consideration of Micro-Organisms and Dissolved Organic Matter. By Richmond M. Bond. Pp. 89. (New Haven, Conn.: Yale University.)