500-2,000 ft. The only known source of water supply is the precipitation within the crater; the average depth is 1,500 ft. The water of the lake is remarkably blue in appearance. It is comparatively pure and free from suspended sediment and dissolved matter. Laboratory tests of specimens suggest that the blue colour is due to scattering of light by water molecules. A. E. MIRSKY: The visual cycle and protein denaturation. Recent work on conjugated proteins suggests that visual purple is such a compound, a carotenoid-protein. Light denatures visual purple, forming a compound, visual yellow, in which the carotenoid group is loosely bound to the protein; in the dark, denaturation reverses. The function of retinene is to provide an increased absorption coefficient in the visible spectrum, to sensitise the protein.

# Forthcoming Events

### Monday, April 20

- VICTORIA INSTITUTE, at 4.30 (at the Central Hall, West-minster).--G. R. Gair: "The Races and Peoples of the Early Hebrew World: a Study in Ethnology
- ROYAL SOCIETY OF ARTS, at 8.-Dr. R. E. Stradling: "Problems of Road Research" (Peter le Neve Foster Lectures. Succeeding lectures on April 27 and May 4).

### Tuesday, April 21

- SOCIETY FOR STUDY OF INEBRIETY AND DRUG ADDICTION, at 4 (at 11 Chandos Street, London, W.1).-Dr. J. D. Rolleston : "On Snuff Taking".
- INSTITUTE OF PATHOLOGY AND RESEARCH, St. Mary's Hospital, W.2, at 5.—Pathological Research in its Relation to Medicine. Sir Almroth Wright, F.R.S.: "Some Results of Recent Research".

### Thursday, April 23

- INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—Dr. J. D. Cockcroft: "The Transmutations of Matter by High Energy Particles and Radiations" (Twenty-seventh Kelvin Lecture).
- FARADAY SOCIETY, April 20-22. General Discussion on "Disperse Systems in Gases: Dust, Smoke and Fog" to be held at the University of Leeds.

# Official Publications Received

## Great Britain and Ireland

Technical Publications of the International Tin Research and Development Council. Series A, No. 31: The Constitution of the Tin-Rich Antimony—Tin Alloys. By Prof. D. Hanson and W. T. Pell-Walpole. Pp. 12. Free. Series A, No. 32: Influence of Surface Cuprous Oxide Inclusions on the Porosity of Hot-Tinned Coatings on Copper. By Dr. W. D. Jones. Pp. 8. Free. Series A, No. 33: The Hot-Tinning of Copper; the Attack on the Basis Metal and its Effects. By E. J. Daniels. Pp. 10. Free. (London: International Tin Research and Development Council.) [233] Engineers' Study Group on Economics. Interim Report on the

and Development Council.) [233 Engineers' Study Group on Economics. Interim Report on the Design of a Family Budget with Special Reference to Food. Pp. 20 (London: Engineers' Study Group on Economics.) 6d. [243 Proceedings of the Royal Society of Edinburgh, Session 1935–1936. Vol. 56, Part 1, No. 1: The Lunar Atmospheric Tide at Glasgow. By Prof. S. Chapman. Pp. 5. 6d. Vol. 56, Part 1, No. 2: The Effect of Present Trends in Fertility and Mortality upon the Future Population of Scotland and upon its Age Composition. By Dr. Enid Charles. Pp. 6–12. 6d. (Edinburgh: Robert Grant and Son, Ltd.; London: Williams and Norgate, Ltd.) [243

## Other Countries

Other Countries Reprint and Circular Series of the National Research Council. No. 10: Industrial Prospecting. By C. F. Kettering. Pp. 3. (Washington, 10: National Research Council.) 25 cents. [23] U.S. Department of the Interior: Geological Survey. Bulletin 833: Xina d Lead Deposits of Northern Arkansas. By Edwin T. McK Industry of Alaska in 1934. By Philip S. Smith. Pp. 11+91+13a. 10 cents. Water-Supply Paper 759: Surface Water Supply of the United States, 1934. Part 4: St. Lawrence River Basin. Pp. vi+91+13a. 10 cents. Water-Supply Paper 769: Surface Water Supply of the United States, 1934. Part 7: Lower Mississippi River Basin. Pp. 10: eents. Water-Supply Paper 769: Surface Water Supply of the 10: eents. Water-Supply Paper 769: Surface Water Supply of the 10: eents. Water-Supply Paper 771: Floods in the United States, 1934. Part 12: North Pacific Slope Basins. C: 10: eents. Water-Supply Paper 771: Floods in the United 10: eents. Water-Supply Paper 771: Floods in the United 10: eents. Water-Supply Paper 771: Floods in the United 10: eents. Water-Supply Paper 771: Floods in the United 10: eents. Mater-Supply Paper 771: Floods in the United 10: eents. Pp. 301. 25 cents. (Washington, D.C. 2007) 10: Core Mainfall and Run-Off in the United States. By 40: eff 10: eff oblating Host Material for the Masser Production of Tricho-10: Monte of the Vanderbilt Marine Museum. No. 6: Scienter 10: C. 60: eff basins, Crustacea: Anomura, MacRura, Euglander, 10: C. 60: eff basins, Crustacea: Anomura, MacRura, Euglander, 10: McMethold Commanding, Crustacea: Anomura, MacRura, Euglander, 10: McMethold Commanding, Crustacea: Anomura, MacRura, Euglander, 10: McMethold Kanter, Marter, Marter, Mol, S, No. 6: Floor, 10: McMethold Kanter, Marter, Marter, Mol, S, No. 6: Floor, 10: McMethold Kanter, Marter, Marter, Mol, S, No. 6: Floor, 10: McMethold Commanding, Crustacea: Anomura, MacRura, Euglade, and 10: McMethold Commanding, Crustacea: Anomura, MacRura, Euglade, and 10: McMethold Commanding, Crustacea:

36. 6d. [30]
 British Honduras. Report of the Forest Trust for the Period 1st April 1933 to 31st December 1934. Pp. 21. (Belize: Forest Department.)
 [303]
 Koninklijk Nederlandsch Meteorologisch Instituut. No. 106a: Ergebnisse Aerologischer Beobachtungen. 23, 1934. Pp. iv +42.
 [403]
 [403]
 [50]
 [61]
 [62]
 [63]
 [63]
 [64]
 [65]
 [75]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]
 [76]

British Holluuras. hepoir of all reaction for the reaction of the second state of the second stat

Printer.) [303 Dominion of Canada. Report of the Department of Mines for the Fiscal Year ending March 31, 1935. (No. 2402.) Pp. iii+48. (Ottawa : King's Printer.) 25 cents. Canada : Department of Mines : Mines Branch. Investigations in Ore Dressing and Metallurgy (Testing and Research Laboratories), July to December 1934. (No. 748.) Pp. ii+202. (Ottawa : King's Printer.) Printer.)

Printer.) [303 Indian Forest Records (New Series). Vol. 1, No. 1 : Shrinkage Studies on Indian Woods. 1 : Effect of High Temperatures on the Shrinkage and Moisture Equilibrium of Wood. By Dr. S. N. Kapur and Azizul Rehman. Pp. iv+41. 1.8 rupees; 2.8. 6d. Vol. 1, No. 12 : Entomological Investigations on the Spike Disease of Sandal. (26) Coccidae (Homopt.). By N. C. Chatterjee and Dr. Rao Saheb T. V. Ramakrishna Ayyar. Pp. ii+233-242. 7 annas ; 9d. (Delhi : Manager of Publications.) Compete Lastitution of Washington. Annual Report of the Director

Carnegie Institution of Washington. Annual Report of the Director of the Department of Terrestrial Magnetism. (Reprinted from Year Book No. 34.) Pp. 223-267. (Washington, D.C.: Smithsonian Insti-tution). tution.) [14

<sup>114</sup> National Geographic Society. Contributed Technical Papers, Pueblo Bonito Series, No. 1: Dating Pueblo Bonito and other Ruins of the Southwest. By A. E. Douglass. Pp. 74. (Washington, D.C.: National Geographic Society.) [14]

#### Catalogues

Anahæmin B.D.H.: the Active Hæmatopoletic Principle of Ltd.) of Dakin and West. Pp. 14. (London: The British Drug Houses, Liver A Catalogue of Books published by the Syndics of the Cambridge University Press. Pp. xiv+337. (London: Cambridge University

Press.)
Press.)
A Catalogue of Books on Systematic Botany, Plant Biology, Cryptogamic Botany, including the Library of the late Prof. Otto Vernon Darbishire. (No. 518.) Pp. 40. (London: Bernard Quaritch, Ltd.) Colloidal Graphite: a Unique Material of Particular Interest to Research Workers. Pp. 23. (London: E. G. Acheson, Ltd.) Druggists, Surgical and Sundries List. Pp. 12. (Manchester 12: David Moseley and Sons, Ltd.) British Industries House. Medical Section Annual, 1936. Pp. 104. (London: British Industries House.)
The Hilger Trichromatic Colorimeter. (Publication No. 240.) Pp. 6. (London: Adam Hilger, Ltd.)