

light. Various means are available for distinguishing between this effect and the thermal variation of the resistance. G. QUAGLIARIELLO: The presence, in the cells of adipose tissue, of a dehydrogenase acting on higher fatty acids. An enzyme, with an action similar to that of the enzyme recently detected in bile, occurs in adipose tissue. A. COMESSATTI: The canonical series of an algebraic surface. F. TRICOMI: A transcendent equation of statics. M. KOURENSKY: The integration of the equations to partial derivatives of the second order with two functions of two independent variables. (3) Systems containing four derivatives of the second order. R. ZOJA: Distribution of the internal tensions in a solid with rectilinear axis and rectangular transverse section. Uniform distribution of the tangential tension (5). M. BOSCOLASCO: Magnetic measurements at Mogadiscio. Measurements of the magnetic elements during August and September, 1932, show that the secular magnetic variations at Mogadiscio have continued during the past six years, but appreciably more slowly than previously. O. BOTTINI: Relationships between the chemical composition of the soil and that of its colloidal contents. Treatment of three alluvial soils free from lime, by washing with water and decantation, shows that, in such soils, chemical decomposition tends to lixiviation of the bases and silica and so leads to the accumulation of ferric oxide and alumina. Comparison of the elementary composition of the soil with that of its colloidal contents gives an indication concerning the degree to which the soil has undergone degradation: the greater the degradation, the more nearly do the two compositions approach equality.

VIENNA

Academy of Sciences, Dec. 1. ERICH TSCHERMAK: Petaloid formation of the calyx in *Phaseolus multiflorus*. The formation of a coloured, corolla-like calyx, previously observed with garden primulas and auriculas, *Soldanella pusilla*, *Cyclamen europæum*, etc., has now been found in three individual hybrids of *Phaseolus vulgaris* and *P. multiflorus*. ROBERT SCHWINNER: Geology of Eastern Styria: the rocks and their inter-relationships. The rocks occurring in this district, especially in the mountainous district between Feistritz and Lafnitz, are described.

Dec. 9. FRIEDRICH LECHNER: Vibrations of certain systems of valency forces with four mass-points. GUNTHER LOCK: Cannizzaro's reaction (2). In continuation of earlier work, further halogenated derivatives, especially chlorobromo-derivatives, of *m*-hydroxybenzaldehyde, have been subjected to Cannizzaro's reaction. The observation that this reaction occurs only with those derivatives which contain at least one hydrogen atom adjacent to the aldehyde group, is confirmed. KARL GIRKMANN: The calculation of cylindrical liquid-containers in relation to wind pressure. OTTO LICKENBERG: Geological and palaeontological investigations in the northern Osterhorn group (Salzburg) (2).

Dec. 15. KARL PRZIBRAM: (1) Recrystallisation and coloration (3). The blue colour change of compressed, irradiated rock salt may be followed down to a loading of 100 kgm. per sq. cm. and a strain of about 2 per cent. The velocity of recrystallisation must be regarded as a function rather of the strain than of the pressure. The repression of the recrystal-

lisation by irradiation previously observed has been confirmed by further experiments with specimens subjected to pressures of 10,000 kgm. (or more) per sq. cm. and also with potassium chloride and bromide; the last salt exhibits especially rapid recrystallisation. (2) Plasticity and hardness of crystals of alkali metal halides. The empirical plasticity law found earlier has been verified by numerous tests with sodium chloride and has been extended to potassium chloride and bromide. Measurement of the Brinell hardness of the three salts reveals, *inter alia*, strengthening by pressure and weakening by recrystallisation. HILMAR SCHUMANN: Petrographic phenomena in the Seckauer Tauern. FRIEDRICH KÜMEL: Outliers of the upper crystalline in the Rosalien Mountains. F. WERNER: New Greek Orthoptera from the region of the Aegean Sea. Observations during November at the Central Office for Meteorology and Geodynamics, Hohe Warte, Vienna.

Official Publications Received

GREAT BRITAIN AND IRELAND

Report of the Rugby School Natural History Society for the Year 1932. (Sixty-sixth Issue.) Pp. 43. (Rugby: George Over, Ltd.)

The Transactions of the Linnean Society of London. 2nd Ser., Zoology, Vol. 19, Part 3: The Percy Sladen Trust Expedition to the Indian Ocean in 1905. Vol. 8, Report No. 12: General Conclusions regarding the Insect Fauna of the Seychelles and adjacent Islands. By Dr. Hugh Scott. Pp. 307-391+plates 17-23. (London: Linnean Society.)

The Science Forum. Vol. 1, No. 1, February. Pp. 35. (London: International Faculty of Sciences.)

OTHER COUNTRIES

Dominion of Canada. Fifteenth Annual Report of the National Research Council, containing the Report of the President and Financial Statement, 1931-1932. Pp. 169. (Ottawa.)

Indian Lac Research Institute. Bulletin No. 11: Resin Secretion on Different Host Plants by the Lac Insect. By M. Venugopalan. Pp. 11. 8 annas. Bulletin No. 13: Orpiment in Shellac. By Dr. R. W. Aldis. Pp. 7. 1 rupee. (Nankum, Ranchi.)

Mitteilungen der Naturforschenden Gesellschaft Bern aus dem Jahre 1932. Pp. lxxii+162. (Bern: Paul Haupt.)

Bergens Museums Årbok, 1932. Hefte 2, Naturvidenskapielig rekke, Nos. 3-6. Pp. 64+57+36+5. (Bergen: John Griegs Boktrykkeri A.-S.)

Medddelelser fra Kommissionen for Danmarks Fiskeri- og Havundersøgelser. Serie Plankton. Bind 2, Nr. 3: On the Food of the Herring in Icelandic Waters. By P. Jespersen. Pp. 34. 265 kr. Serie Plankton, Bind 2, Nr. 4: Einleitende Untersuchungen über die Stoffproduktion des Planktons. By E. Steemann Nielsen. Pp. 14. Serie Fiskeri, Bind 9, Nr. 6: The "Red Disease" of the Eel in Danish Waters. By Anton Fr. Bruun and Børge Heiberg. Pp. 19. (København: C. A. Reitzels Forlag.)

Ministry of Agriculture, Egypt: Technical and Scientific Service. Bulletin No. 126: Results of a Citrus Fertilizer Experiment on Sandy Soil. By Dr. Yousif Milad. Pp. 6+4 plates. (Cairo: Government Press.) 5 P.T.

Memoirs of the Faculty of Science and Agriculture, Taihoku Imperial University. Vol. 5, No. 6: Mathematics. No. 3: Beiträge zur Geometrie der Kreise und Kugeln (11). By Soji Matsumura. Pp. 169-206. (Taihoku.)

The Science Reports of the National Tsing Hua University. Series A: Mathematical and Physical Sciences. Vol. 1, No. 6, December. Pp. iv+215-299. (Peiping.)

Proceedings of the California Academy of Sciences, Fourth Series. Vol. 21, No. 1: The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 1: Foreword. By C. E. Grunsky. Pp. 2. Vol. 21, No. 2: The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 2: Introductory Statement. By Templeton Crocker. Pp. 3-9+1 plate. Vol. 21, No. 3: The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 3: The Genus *Mollugo* in the Galapagos Islands. By John Thomas Howell. Pp. 13-23. Vol. 21, No. 4: The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 4: Characters of Twenty-four New Species of Hemiptera from the Galapagos Islands and the Coast and Islands of Central America and Mexico. By E. P. Van Duzee. Pp. 25-40. Vol. 21, No. 5: The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 5: The Cactaceae of the Galapagos Islands. By John Thomas Howell. Pp. 41-54+plates 2-3. (San Francisco.)

CATALOGUES

Catalogue of Books on Applied Chemistry. Pp. 30. Catalogue of Books on Chemistry (Organic; Inorganic; Physical). Pp. 22. (London: H. K. Lewis and Co. Ltd.)

Catalogue of Microscopic Objects. Part 3. Thirty-third edition. Pp. 60. (London: W. Watson and Sons, Ltd.)

Multipoint Recording Pyrometer. (List No. T22). Pp. 8. (London: Negretti and Zambra.)