

PARIS

Academy of Sciences, April 18 (*C.R.*, 196, 1153-1176). M. GIGNOUX and L. MORET: The prolongation in Haute-Savoie and in Switzerland of the structural units of the Dauphiny Alps. D. VAN DANTZIG: The fundamental group of compact abstract groups. SAINTILLAN: Forces of inertia of a system and a carrying along movement. R. TREMBLOT: A variable star with eclipses of short period. The star *BD. 10-838* (Henry Draper Catalogue, *H.D.* 26909) has been recently shown by C. Hoffmeister to be a variable with very short period. The author's observations from January until March, 1933, confirm this and suggest that the variability is due to two stars and not to one star rotating on itself. MME. RÉCHID: Study of the thermal decomposition of ammonium phosphate. MLES. M. MONTAGNE and G. ROUSSEAU: The preparation of the anils of fatty ketones. HENRI LAGATU and LOUIS MAUME: The comparative composition, in the vine, of homologous leaves taken respectively from stems carrying fruit and stems deprived of their grapes. The leaves from stems carrying grapes are poorer in lime, nitrogen and potash but richer in phosphoric acid than the homologous leaves from sterile branches. A. MAGNAN and A. SAINTE-LAGUË: Analysis of the 'hovering' of the *Volucella*. E. FOURNEAU, M. and MME. J. TREFOUËL, D. BOVER and PIERRE KETSCHET: Chemicotherapy of infections with *Trypanosoma congolense*. The selective action of polyarsenical organic compounds.

CRACOW

Polish Academy of Science and Letters, Jan. 9. L. CHWISTEK, W. HETPER and J. HERZBERG: (1) The fundamentals of rational metamathematics. (2) Remarks on the fundamentals of rational metamathematics. M. JEZEWSKI and J. KAMBECKI: The dielectric constants of aqueous electrolytes. The dielectric constants of solutions of various electrolytes have been measured at concentrations varying from zero to 0.01 *N*. K. DZIEWOŃSKI and L. STERNBACH: The reactions of α -naphthylamine with benzoyl chloride. MLE. J. ACKERMANN: The innervation of the skin of *Amblystoma mexicanum*. Z. KOŁODZIEJSKI: The transplantation of young larvae of axolotl on adult animals. L. W. WISNIEWSKI: Remarks on the systematics of the family of Coitocæcidæ. T. VETULANI: Researches on the types of Arab horses raised in Turkey.

GENEVA

Society of Physics and Natural History, Feb. 16. F. CHODAT and M. JUNQUERA: The reduction of methylene blue by an *Endomyces* at the expense of its endocellular hydrogen donators. The authors study the variations of the reducing activity of *Endomyces Chodati* in the system: methylene blue (acceptor), living yeast (ferment), in the absence of an extra-cellular hydrogen donator (Thunberg's technique, MacIlvaine's buffer mixture, temperature, 40° C.). The optimum conditions of *pH*, and of the age of the organisms are described. α -Monobromacetic acid, even when added in high concentrations, is without effect on the enzymatic process. M. GYSIN: Petrographic researches in the Haut-Katanga. (2) The formations of the Kundelungu. In the south-east part of the Haut-Katanga, the Kundelungu is represented from bottom to top by a schisto-grit dolomitic and clay

conglomerate (tillite), by limestones and dolomite massifs, dolomitic grits with a little felspar and clay, by lustrous schists sometimes containing grit and by felspathic and dolomitic grits passing to quartzites. The author gives the correlations between these formations and those recognised in northern Rhodesia and in the cupriferous district of the Katanga. He then describes the petrographic constitution of these different rocks. A. LOMBARD: The Virgolian and the stratigraphy of the Portlandian of the Col du Marchairuz region. The Virgolian in the neighbourhood of the Col du Marchairuz and the Monts de Bière (Vaudois Jura) has been described by various geologists. Completing these data, the author demonstrates that this sub-stage is reduced to zero to the south-west of the Marchairuz. It is then impossible to distinguish the lower Portlandian from the upper Kimmeridgian. The upper Portlandian is characterised by marly limestones, important dolomitic levels and argneules. The latter increase in thickness from north-east to south-west. The dolomitic layers diminish. H. PAILLARD and R. DUCKERT: Researches on the catalytic oxidation of acenaphthene. The authors have studied the oxidation of acenaphthene in solution in various solvents by the action of compressed oxygen and in the presence of catalysts capable of giving oxides of nitrogen. Under these conditions the only important oxidation product is naphthalic acid. H. PAILLARD and P. FAVARGER. Researches on the chlorination of acenaphthene. The authors have studied the action of chlorine on acenaphthene and the conditions necessary for obtaining a good yield of 5-chloroacenaphthene. A. PERIER: The influence, in a homogeneous ethnic group, of the variation of the cephalic index on that of the alveolo-palatinal and superior facial indices. The superior facial and alveolo-palatinal indices show no correlation with variation of the cephalic index. Hence their relative stability, a disharmony inasmuch as the most brachycephalic skulls, are, proportionally, the most leptene and the most leptostaphyline. G. TIERYC: The respective phases of minimum ionisation and light minimum in the Cepheids. The author attempts to show how the combined effect of the curve of radii velocities, of that of light and of the theory of radiating equilibrium affords an explanation of the fact that the minimum ionisation phase precedes the light minimum.

Forthcoming Events

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

Wednesday, June 7

FOLK-LORE SOCIETY, at 8—(at University College, Gower Street, W.C.1).—Mrs. E. S. Drower: "Mandaean Magic, White and Black". (Discussion).

Thursday, June 8

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE, at 2.—Sir George Buchanan: "International Hygiene" (succeeding lecture on June 9).*

UNIVERSITY COLLEGE, LONDON, at 2.30.—Sir Flinders Petrie: "Egyptian Links with the Past" (to be repeated on June 10 at 3, and June 13 at 5.30).*

ROYAL COLLEGE OF PHYSICIANS OF LONDON—(Croonian Lectures).—Prof. E. Mellanby: "Nutrition and Disease—the Interaction of Clinical and Experimental Investigations" (succeeding lectures on June 13 and 15).

Friday, June 3

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE, at 2.—F. Radcliffe: "Factory Medical Work".*
LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE, at 5.—N. H. Mummery: "The Practice of Industrial Medicine".*

ANNUAL CONGRESS OF THE SOUTH-EASTERN UNION OF SCIENTIFIC SOCIETIES, June 7-10. Prof. E. J. Salisbury—president.

Official Publications Received

GREAT BRITAIN AND IRELAND

Proceedings of the Royal Society of Edinburgh, Session 1932-1933. Vol. 53, Part 2, No. 10: Spermatogenesis in *Drosophila obscura* Fallen, 1: The Cytological Basis of Suppression of Crossing-over. By Dr. P. Ch. Koller and Thelma Townson. Pp. 130-143+3 plates. (Edinburgh: Robert Grant and Son; London: Williams and Norgate, Ltd.) 2s.
The University of Sheffield: Research Department for the Cold Working of Steel and other Ferrous Metals. Reports to December 1932. Pp. 72. (Sheffield.)
The Empire Journal of Experimental Agriculture. Vol. 1, No. 1, April. Pp. 96. (Oxford: Clarendon Press; London: Oxford University Press.) 7s. 6d. net.
Royal Astronomical Society. List of Fellows and Associates, 1933 March. Pp. 45. (London: Royal Astronomical Society.)
Proceedings of the Royal Society. Series A, Vol. 140, No. A841, May 3. Pp. 241-483. (London: Harrison and Sons, Ltd.) 12s.
The Transactions of the Worcestershire Naturalists' Club. Vol. 8, Part 5, 1928-1931. Edited by Carleton Rea. Pp. v-x+295-392+123-139. (Worcester.) 10s.
Joseph Priestley, 1733-1804. By Dr. Robert Martin Caven. Pp. 25+6 plates. Chemistry and Life. (The Fourth Gluckstein Memorial Lecture, 1932.) By Sir Frederick Gowland Hopkins. Pp. 21. The Chemist in the Far East. By Alexander Marcan. Pp. 18. (London: Institute of Chemistry.)
Royal Botanic Gardens, Kew. Bulletin of Miscellaneous Information, 1932. Pp. iv+512+54+57+12 plates. (London: H.M. Stationery Office.) 15s. net.
Agricultural Progress; the Journal of the Agricultural Education Association. Vol. 10, 1933. Pp. 252. (Cambridge: W. Heffer and Sons, Ltd.) 5s. net.
Proceedings of the Royal Irish Academy. Vol. 41, Section A, Nos. 5-6: The Frequency Distribution of Resonance Radiation, by Dr. R. W. Ditchburn; The Transmission of Resonance Radiation through a Gas (Steady State), by Dr. R. W. Ditchburn. Pp. 41-60. 1s. 6d. Vol. 41, Section B, Nos. 10-11: The Synthesis of Diflavones, by Dr. Joseph Algar, Isabella B. McCarthy and Evelyn M. Dick; The Action of Ammonia on Ethyl Malonate and Ethyl Malonamide, by Dr. Kenneth C. Bailey. Pp. 155-167. 1s. (Dublin: Hodges, Figgis and Co.; London: Williams and Norgate, Ltd.)
Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1498 (T.3218): Spinning Calculations on some Typical Cases. By H. B. Irving and A. S. Batson. Pp. 26+10 plates. 1s. 6d. net. No. 1501 (Spin. 70, 70a, T.3243): Tests of Floating Ailerons on a Bristol Fighter Aeroplane. Part 1: Rolling Balance Tests, by F. B. Bradfield and G. F. Midwood; Part 2: Full Scale Tests, by A. V. Stephens. Pp. 26+20 plates. 1s. 9d. net. (London: H.M. Stationery Office.)
Report of the National Baby Week Council, 1932: presented and adopted at the Sixteenth Annual Meeting of the National Baby Week Council held in London on the 22nd March, 1933. Pp. 26. (London.)
The Ninety-ninth Annual Report of the Royal Cornwall Polytechnic Society. New Series, Vol. 7, Part 2, 1932. Pp. xiii-xxvi+107-202+xvii. (Camborne.) 5s.
Proceedings of the Cambridge Philosophical Society. Vol. 29, Part 2. Pp. 165-318. (Cambridge: At the University Press.) 7s. 6d. net.
Armstrong College, Newcastle upon Tyne: Standing Committee for Research. Report, Session 1931-1932. Pp. 42. (Newcastle upon Tyne.)
North-Eastern Rhodesia: Geodetic Survey of South Africa. Vol. 6: Report on the Measurement of the Arc of the Thirtieth Meridian in North-Eastern Rhodesia. Executed by Dr. T. Rubin under the direction of Sir David Gill. Pp. 123. (London: H.M. Stationery Office.) 10s. net.
The Kent Incorporated Society for Promoting Experiments in Horticulture. Annual Report, 1932, East Malling Research Station, Kent, 1st January 1932 to 31st December 1932. Pp. 163+11 plates. (East Malling.) Free to Associate Members; to Non-Members, 3s. 6d.
The Journal of the Institution of Electrical Engineers. Edited by P. F. Rowell. Vol. 72, No. 437, May. Pp. 365-460+xviii. (London: E. and F. N. Spon, Ltd.) 10s. 6d.
Memoirs of the Cotton Research Station, Trinidad. Series A (Genetics), No. 5: Cytological Studies in Cotton, 1: The Mitosis and Meiosis in Diploid and Triploid Asiatic Cotton. By A. Skovsted. Pp. 227-251+plates 8-11. (London: Empire Cotton Growing Corporation.) 2s. 6d.
Board of Education. Educational Pamphlets, No. 93: An Experiment in Rural Organisation. Pp. 35+4 plates. (London: H.M. Stationery Office.) 9d. net.
Journal of the Royal Statistical Society. Vol. 96, Part 2, 1933. Pp. viii+183-380. (London: Royal Statistical Society.) 7s. 6d.
Proceedings of the Linnean Society of London, Session 1932-33. Part 2. Pp. 49-104. (London: Linnean Society.) 2s.

OTHER COUNTRIES

Spisy vydávané Přírodovědeckou Fakultou Masarykovy University (Publications de la Faculté des Sciences de l'Université Masaryk). Čís. 169: On the Bodily Differences between Sprinters and Non-Sportsmen (A Study of 100 Students from different Grammar Schools in Brno). By Dr. R. Malafa. Pp. 11. (Brno: A. Píša.)
Práce Moravské Přírodovědecké Společnosti. Svazek 8, Spis 4, Sign. P68: On the Question of Human Races on the Basis of the Precipitin Test and Isoagglutinins (Eskimos, Kalmuks, Gipsies, Europeans including Jews). By Prof. V. Suk. Pp. 42. (Brno: A. Píša.)
Transactions of the Mining and Geological Institute of India. Vol. 28, Part 1, April. Pp. 65. (Calcutta.) 4 rupees.
Scientific Papers of the Institute of Physical and Chemical Research. No. 414: On the Constitution of Phosphorescence Centres in Fluorite. By Satoyasu Iimori. Pp. 189-200. 25 sen. Nos. 415-421: On the Constitution of Stachyose, a Tetrasaccharide obtained from *Stachys tuberosa* Np, by Motoi Onuki; Nutritive Value of Sperm Whale Oil and Finback Whale Oil, by Yoshikazu Sahashi; On the Ergosterin Content of various Edible Mushrooms in Japan, by Midzuo Sumi; Narkotin und Vitamin C, von Suttekiti Maruyama; The Thermoluminescence Spectrum of Calcite, by Satoyasu Iimori; Note on the Spectra of PbII, HgI, SbI, CIII and JII, by Kiyoshi Murakawa; Dependence of K Lines of Elements from Cu to Ti on Chemical Combination, by Sanae Yoshida. Pp. 210-310. 95 sen. (Tokyo: Iwanami Shoten.)
Travaux de la section de Géodésie du l'Union Géodésique et Géophysique Internationale. Tome 8: Rapports généraux établis à l'occasion de la quatrième assemblée générale, Stockholm, 11-23 août 1930. Pp. vi+136+16+79+24+85+14+32+28+5+24+ii. (Paris.) 120 francs.
Journal de la Société des Américanistes. Nouvelle Série, Tome 24, Fasc. 2. Pp. xxix+221-446. (Paris.)
Proceedings of the Imperial Academy. Vol. 9, No. 3, March. Pp. v-vi+83-142. (Tokyo.)
The Geology and Underground Water of Rangoon (with Special Reference to Tube-Wells). By P. Leicester. Pp. iv+78+10 plates. (Rangoon: Government Printing and Stationery Office.) 15 rupees: 22s. 6d.
Mineral Resources: British Guiana. Particulars re Geological Formation and Surveys, Previous Workings, Communications, Transport, etc., in the North West District, Mazaruni and Puruni District, Potaro-Essequibo District. Pp. 64. (British Guiana: Department of Lands and Mines; London: The Crown Agents for the Colonies.) Free.
National Research Council of Japan. Report No. 10, April 1930—March 1931. Pp. ii+351-391+6. (Tokyo.)
Koninklijke Vereeniging "Koloniaal Instituut" Amsterdam. Twee en twintigste Jaarverslag 1932. Pp. 116. (Amsterdam.)
Sveriges Geologiska Undersökning. Ser. C, No. 376: Den järnmalmstörande lagerserien i sydöstra Skåne. Av Assar Hadding. Pp. 39. 1.00 kr. Ser. C, No. 377: Vemdalskvartsitens ålder. Av Bror Asklund. Pp. 56. 1.00 kr. Ser. C, No. 378: Bidrag till kännedomen om kambrium och ceratoprygeregionen inom Storsjöområdet i Jämtland. Av Per Thorslund. Pp. 11. 0.50 kr. (Stockholm: P. A. Norstedt and Söner.)
Annual Report of the Harbour Commissioners of Montreal for the Year 1932. Pp. 121. (Montreal: Harbour Commissioners of Montreal.)
Publications of the Dominion Astrophysical Observatory, Victoria, B.C. Vol. 5, No. 3: The Problems of the Diffuse Matter in the Galaxy. By J. S. Plaskett and J. A. Pearce. Pp. 167-237. 50 cents. Vol. 6, No. 6: The Minimum Masses of Three Spectroscopic Binary Stars. By J. A. Pearce. Pp. 49-58. Vol. 6, No. 7: The Spectroscopic Orbits of the Four Helium Stars H.D. 29376, H.D. 39698, H.D. 44701 and H.D. 208095; The Radial Velocity of Boss 5628. By J. A. Pearce. Pp. 59-77. Vol. 6, No. 8: The Orbits of Four Spectroscopic Binaries. By W. E. Harper. Pp. 79-91. (Ottawa: F. A. Acland.)
Publications de l'Observatoire de Genève. Rapport sur les concours de réglage de chronomètres de l'année 1932. Par Prof. Georges Tiercy. Pp. 25. (Genève.)
Department of Agriculture: New South Wales. Veterinary Research Report. No. 6, Part 3 (December 1931). Pp. 93-136+4 plates. (Sydney: Alfred James Kent.)

CATALOGUES

Catalog and Price List of Eastman Organic Chemicals. (List No. 24.) Twenty-fourth edition. Pp. 108. (Rochester, N.Y.: Eastman Kodak Co.)
Metal and Nickel in the Chemical and Allied Industries. (MH3.) Pp. 16. (London: Henry Wiggin and Co., Ltd.)
Heffer's Book Adviser, or What shall I Read? No. 2, April. Pp. 24. (Cambridge: W. Heffer and Sons, Ltd.)
Gardens and Gardening, Botany (General and Cryptogamic), Local Floras, Forestry, Timber, etc. (Catalogue No. 208.) Pp. 44. (London: Dulau and Co., Ltd.)
Watson's Microscope Record. No. 29, May. Pp. 24. (London: W. Watson and Sons, Ltd.)
Some Examples of "Vidi" Illustrations. Pp. 12. (London: The Kathleen Boland Studio.)
The Nickel Bulletin. Vol. 6, No. 5, May. Pp. 63-82. (London: The Mond Nickel Co., Ltd.)
Liver Extract B.D.H. (for Injection) in the Treatment of Pernicious Anæmia by Intramuscular Injection. Pp. 4. (London: The British Drug Houses, Ltd.)

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