

January 8. S. MAZURKIEWICZ: Translative means and the law of Gauss. H. GAMS: The Starunia mosses considered as an index of the character of the flora and climate, as well as the principal petrifactions of the diluvial epoch. J. STACH: The genus *Oncopodura*, and also a new species belonging to this genus, found in the caves of north-east Italy. T. VETULANI and R. SCHULZE: The hypophysis of the small Polish horse representing the type of the tarpan horse (1 and 2).

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Academy of Sciences (*C.R.*, No. 3, 1934). V. FOCK: New asymptotic expression for Bessel's functions. N. KOSHLIAKOV: On a certain definite integral connected with the cylindrical function $K_\nu(x)$. I. VERCHENKO and I. KHOLMOGOROV: Discontinuities in the functions of two variables. A. KAPUSTINSKIY: The problem of the composition of air in the stratosphere. Samples of air brought from the stratosphere by Prokofiev proved to be almost identical with the air near the ground. This can be explained by the enrichment of the stratosphere by nitrogen owing to gravitation (Laplace's rule), and by oxygen through thermal diffusion as described by Dootson, Chapman and Endskog. G. KWATER, N. KREMENEWSKY and A. FILIPPOV: The absorption spectrum of thallium vapour in the ultra-violet. M. SAVOSTIANOVA: The problem of the excitation of an alkali-haloid crystal. A. CHICHIBABIN and M. OPARINA: The volatile base of Valerian roots. The base is a colourless oil, which does not crystallise at 0° C. and is insoluble in water. I. N. NAZAROV: On metal-ketyls of the aliphatic series (2). It is only secondary and tertiary radicals connected with a carbonyl group that make possible the existence of metal-ketyls. The stability of metal-ketyls is particularly increased by the tertiary heptyl $(C_2H_5)_3C$. K. GORBUNOVA and A. VAHRAMIAN: The mechanical activation of the surface of an electrode. The formation of the first microcrystals occurs at a lower potential when the surface of the electrode bears scratches, than when it is intact. A. CHARIT and I. FEDOROV: The oxidation and reduction processes during muscular contraction (2). The oxidation-reduction potential of blood and of urine under the influence of muscular work. The potential of arterial blood before work was 0.607 v., and after work 0.578 v.; figures for the venous blood were 0.580 v. and 0.557 v.; and for urine, 0.118 v. and -0.73 v. respectively. D. SABININ: (1) Exchange adsorption in root systems. Adsorption processes play an important part in the entrance of substances into cells, if the substances are derived from diluted solutions with varying values of pH and in the presence of surface active substances. (2) Influence of the technique and time of the introduction of fertilisers on the nature of plants. M. SHKOLNIK: The physiological rôle of boron. The absorption by plants of phosphate, nitrate and calcium decreases in the presence of boron, which therefore exercises an influence on the permeability of the protoplasm. V. CIVINSKIY: Capacity of cotton to withstand cold. Those varieties in which the concentration of the cellular sap was high proved to be most resistant to frost, but some other factors may also be of importance. B. B. ROHDENDORF: Some new species of Tachinids from U.S.S.R. Two new species of *Craspedothrix* (Diptera, Larvævoridæ). O. VIALOV and R. VIALOVA: The age of the tuffogenous suite of Caucasian flysh. The fossils indicate that the suite belongs to the Cenomanian.

Forthcoming Events

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

Monday, April 30

UNIVERSITY COLLEGE, LONDON, at 5.—Prof. C. Singer and K. J. Franklin: "The History of Physiology" (succeeding lectures on May 1, 2, 7, 8, 14, 15 and 22).*

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—F. Kingdon Ward: "The Himalaya East of the Tsangho Gorge".

Wednesday, May 2

ROYAL SOCIETY OF ARTS, at 8.—J. C. Wilson: "Trichromatic Reproduction in Television".

Thursday, May 3

KING'S COLLEGE, STRAND, W.C.2, at 5.—Prof. R. J. S. McDowall: "The Integration of the Circulation" (succeeding lectures on May 10, 17 and 24).*

INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—Dr. M. Schleicher: "Modern Practice in Germany and other Parts of the European Continent with regard to Supervisory Control Systems as applied to Large Inter-connected Supply Areas".

CHEMICAL SOCIETY, at 8.—Discussion on "Unicellular Chemistry" to be opened by Dr. J. Vargas Eyre.

Friday, May 4

PHYSICAL SOCIETY, at 5.—Prof. C. V. Boys: "My Recent Progress in Gas Calorimetry" (Nineteenth Guthrie Lecture).

HUXLEY MEMORIAL LECTURE, at 5.30.—(in the Lecture Theatre, Huxley Building, Exhibition Road, South Kensington, S.W.7).—Prof. Johan Hjort: "The Restrictive Law of Population".

INSTITUTION OF MECHANICAL ENGINEERS, at 7.—R. C. Walker: "Photoelectric Cells and their Application". (Informal meeting.)

GEOLOGISTS' ASSOCIATION, at 7.30.—(in the Architectural Theatre, University College, Gower Street, W.C.1).—L. A. Wager: "Mount Everest and the Eastern Himalaya".

WORLD'S DAIRY CONGRESS, April 30—May 6.—To be held at Rome and Milan.

Official Publications Received

GREAT BRITAIN AND IRELAND

Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1582 (I.C.E. 887; T.V.C. 59): Torsigraph Investigations on a Radial Engine with and without a Spring Hub, with some reference to Damping. By B. C. Carter, N. S. Muir and H. Constant. Pp. 14+19 plates. (London: H.M. Stationery Office.) 1s. 6d. net.

OTHER COUNTRIES

Obras completas y Correspondencia científica de Florentino Ameghino. Vol. 12: Primera Sinopsis Geológico-paleontológica. Dirigida por Alfredo J. Torcelli. Pp. 770. (La Plata: Gobierno de la Provincia de Buenos Aires.)

Kungl. Svenska Vetenskapsakademiens Handlingar. Serien 3, Band 13, No. 2: Untersuchungen über Dunkelnebel. Von Carl Schälén. Pp. 47. (Stockholm: Almqvist and Wiksells Boktryckeri A.-B.)

Proceedings of the California Academy of Sciences, Fourth Series. Vol. 21, No. 13: The Templeton Crocker Expedition of the California Academy of Sciences, 1932. No. 13: Diptera. By C. H. Curran. Pp. 147-172. (San Francisco.)

Smithsonian Institution. Explorations and Field-Work of the Smithsonian Institution in 1933. (Publication 3235.) Pp. iv+59. (Washington, D.C.: Smithsonian Institution.)

Editorial and Publishing Offices:

MACMILLAN & CO., LTD.

ST. MARTIN'S STREET, LONDON, W.C.2

Telephone Number: WHITEHALL 8831

Telegraphic Address: PHUSIS, LESQUARE, LONDON