

Societies and Academies

Edinburgh

Royal Society, October 25.

J. W. S. MARR: Antarctic surveys: The work of the "Discovery" investigations (Bruce Memorial Prize lecture, 1936). The Discovery Committee, in spite of the heavy commitments of a comprehensive oceanographical programme, has not overlooked the urgent need for reliable charts of the little-known Antarctic lands, and of the widely scattered, remote and frequently inaccessible island groups that are the dependencies of the Falkland Islands. Among other things it was this aspect of the Committee's researches that Dr. W. S. Bruce himself had so strongly supported in an interview at the Colonial Office nearly twenty years ago. In the twelve years the Discovery investigations have been in existence, much has been done to further existing knowledge of these distant coasts. The cartography of this region is emerging slowly from a state of uncertainty and confusion, and will, it is hoped, in time reach one which may prove useful to future scientific or commercial enterprise.

Paris

Academy of Sciences, September 27 (*C.R.*, 205, 529-548).

CHARLES JACOB: Obituary notice of Albert Heim.

LOUIS LAPICQUE: Isochronism as a condition of intercellular transmission of stimulation.

PAUL LÉVY: New contribution to the arithmetic of products of Poisson's law.

RODOLPHE HENRI GERMAÏ: The existence of functions associated with the solutions of completely integrable systems of total differential equations with linear coefficients.

SANTIAGO ANTUNEZ DE MAYOLO: The composition of the electron and the energy of fixation.

PIERRE DUPIN and LOUIS SACRÉ: The measurement at a distance of the electrical state of the surface of insulating bodies.

Mlle. SUZANNE VEIL: The presence of iodine dissolved in aqueous solutions of potassium iodide, and the electrical properties of the medium.

HENRI MOUREU, MICHEL MAGAT and GEORGES WETROFF: The stereochemical structure of phosphorus pentachloride. In an earlier paper, the authors have suggested that phosphorus pentachloride exists in two forms, the solid state possessing an unsymmetrical structure, the liquid form a symmetrical structure. These considerations are applied to explain anomalies of electrical conductivity and dielectric constant described by various authors, and also certain differences in chemical reactivity.

Amsterdam

Royal Academy (*Proc.*, 40, No. 7, Sept. 1937).

J. CLAY: The energy and penetrating power of cosmic rays. A survey of the evidence for the energy and corpuscular nature of cosmic rays.

F. M. JAEGER, J. TER BERG and P. TERPSTRA: Optical rotation and rotatory dispersion in solution and in the crystalline state.

P. E. VERKADE, J. VAN DER LEE, MISS J. C. DE QUANT and E. DE ROY VAN ZUYDEWIJN: New methods for the synthesis of glycerides (2).

MISS W. A. LUB: The optical spectrum of actinium. New lines due to actinium.

MISS J. G. EYMERS and H. P. BOTTELIER: Protoplasmic movement in the oat coleoptile as related to oxygen pressure and age.

A. KAWAGUCHI: The relation between a metric, linear connexion and a non-metric one in a general metric space.

P. TERPSTRA and J. TER BERG: The crystal form of some complex salts of triaminopropane with trivalent cobalt and rhodium.

A. W. H. VAN HERK: The chemical processes in the spadix of *Sauromatum*.

G. C. HIRSCH: Outlines of a theory of the Golgi bodies. (1) The Golgi bodies in space.

L. H. BRETSCHNEIDER and J. J. DUYVENÉ DE WIT: The hormone chain: active urine substance → ovary → ovipositor in *Rhodeus amarus*.

P. JULIEN: (1) Distribution of the blood groups in some peoples of Liberia and Sierra Leone. (2) Studies in blood group correlations in some peoples of Liberia and Sierra Leone.

Cracow

Polish Academy of Science and Letters, July 1.

W. JACYNA: The thermodynamic scale below 1° K. Data concerning the thermodynamic scale below 1° K. are doubtful for two reasons, the inexactitude of the thermomagnetic equation and the irreversibility of the adiabatic demagnetization.

T. BANACHIEWICZ: The numerical solution of a system of linear equations.

B. KAMIENSKI: Thermodynamical considerations on dielectric potential and surface tension.

B. NIKLEWSKI and Mlle. J. WOLNICKA: The morphological phenomena produced as the result of chemotropic irritation of the roots.

H. GROSSFELD: Osmotic pressure and intravital coloration.

H. GROSSFELD: A method applied in researches on the permeability of animal tissue cells.

Rome

National Academy of the Lincei (*Atti*, 25, 353-412; 1937).

A. DE MIRA FERNANDES: Expressions for the curvature of a surface.

G. PALAMÁ: The transformation of Gauss and the Hermite polynomials.

T. TURRI: An observation on the classification of curves of the second kind.

G. COLONNETTI: The elastic equilibrium of systems in which non-elastic deformations also occur (1).

G. PERETTI: Plastic sources.

C. TOLOTTI: Generalization of Dirac's equations for the space of general relativity.

L. CAVALLARO: Absorption bands in polar substances at very high radio frequencies (1).

A. MANGINI: Aromatic nitroderivatives (13). Some substituted α -naphthylamines.

G. DAL PIAZ: Geological structure of the Austrides (5). Some further work on the Austrian alpine system of the Eastern Alps.

A. CAVINATO: Morenosite from Val Malenco.

G. BORZINI: Observations on the parasitism of *Sclerotinia libertiana sclerotiorum* Fuck associated with other fungi.

A. SALVATORI: Further contribution to the study of post-operation hypochloræmia.