

## University Events

CAMBRIDGE.—The Adams Prize, offered every two years for an essay on some branch of pure mathematics, astronomy, or other branch of natural philosophy, value £246, has been awarded to Mr. W. V. D. Hodge, Pembroke College. Essays of great distinction were submitted by Mr. T. Groom, St. John's College, Dr. J. A. Todd, Trinity College, and Dr. P. Du Val, Trinity College.

At St. John's College, the following have been elected into fellowships: Dr. A. C. Offord, Keddey Fletcher-Warr Student in mathematics, University of London, 1934-37; F. Smithies, Wrangler and B, Part II, Mathematical Tripos, 1933, Baylis Student, 1934, Rayleigh Prize, 1935, Carnegie Fellow, 1935-37; R. A. Lytton, Clare College, Wrangler and B, Part II, Mathematical Tripos, 1933, Tyson Medal for Astronomy, 1933, Procter Fellow at Princeton University, 1935-37.

The Buildings Syndicate recommends that a site be assigned for the new Austin Wing of the Cavendish Laboratory.

C. C. Okell, of St. John's College, has been approved for the degree of Doctor of Science.

At Emmanuel College Dr. R. G. W. Norrish, professor of physical chemistry in the University, has been elected into a professorial fellowship.

It is proposed that a Mathematical Laboratory be constituted as a Department in the Faculty of Mathematics, that the head of the Department be the director of the Mathematical Laboratory, and that Prof. Lennard-Jones be appointed director of this Laboratory.

Proposals are before the University for the addition of metallurgy to the list of subjects which may be taken in Part II of the Natural Sciences Tripos.

MANCHESTER.—The resignation is announced of Prof. W. L. Bragg, since 1919 Langworthy professor of physics, who has built up in the University a school of research well known for its investigations of the solid state of matter. Prof. Bragg has been appointed director of the National Physical Laboratory (see p. 829).

## Societies and Academies

### Paris

Academy of Sciences (*C.R.*, 204, 1049-1092, April 5).

CHARLES ACHARD, AUGUSTIN BOUTARIC and M<sup>lle</sup>. PAULETTE BERTHIER: Researches on the viscosity of solutions of bile. Viscosity data from three specimens of ox bile in aqueous solutions at concentrations varying from 5 to 100 per cent, and discussion of the results applying the formulæ of Einstein and of Kunitz.

LUCIEN MALAVARD: The method of electrical analogies for the calculation of the wall corrections [of wind tunnels].

ETIENNE KONDROR: The Caquot theory of the equilibrium of soils.

M<sup>lle</sup>. MARIE BLOCH: The spectrum of Nova Lacertæ 1936, slightly after the maximum brightness. Comparison of the spectra of Nova Lacertæ and Nova Herculis.

GEORGES ALLARD: An expression for the mean electrical density of a complex atom.

NY TSI-ZÉ and SHANG KENG-YI: The vibrations of plates of quartz cut in various planes around the optical axis of the crystal. The relations found by experiment between the angle starting with the Curie section and the frequency are given as curves.

THÉODORE V. IONESCU: Calculation with the aid of the quantum theory of the energy emitted by an antenna.

RENÉ FREYMAN: The two infra-red (OH) bands of the alcohols and the polyalcohols: molecular associations.

ANDRÉ MICHEL: The relations between the different solid solutions formed by ferrous sulphide.

LOUIS BOUCHET: The colloidal state caused by various specimens of zinc acting on some natural waters.

MICHEL CYMBOLISTE: The hardness of electrolytic chromium. The hardness varies with the current density, the temperature and the chromate concentration. Deposits of chromium, with hardness varying between 1,200 and 400 (Brinell), can be obtained at will by varying the above factors.

MAURICE GIRARD: The influence of the replacement of a hydrogen atom in the  $\beta$  position by a methyl group in phenyl- $\alpha$ -oxycrotonic acid.

PAUL CHOVIN: Researches on the Pechmann colouring matters. The synthesis of some colouring matters with unlike substituents.

VSEVOLAD DE GOLOUBINOFF: Differential geochemical prospecting of mineral deposits.

VLADIMIR FROLOW: The analysis of the levels of Lake Ontario.

FRANTISEK LINK: Influence of the season and of the climate on astronomical refraction and the distribution of air masses.

ANDRÉ EICHHORN: Nuclear evolution and chromosome enumeration in *Begonia Pictaviensis*.

RENÉ VANDENDRIES: New views on the sexuality of the Basidiomycetes.

PIERRE CARRÈRE: Some metacercaria of *Atherina mochon*; the experimental development of a Gastrostomid.

CONSTANTIN DAWYDOFF: The Gastrosdes of Indo-Chinese waters and some observations on their evolutionary cycle.

MICHEL POLONOVSKI, GASTON BIZARD and HENRI WARENBOURG: The action of insulin on the muscular glycogenolysis in the dog.

### Brussels

Royal Academy (*Bull. Classe Sci.*, 23, No. 1, 1937).

L. GODEAUX: Some algebraic hyperspatial surfaces.

T. DE DONDER and MISS Y. DUPONT: New theory of the dynamics of continuous systems (4). Application to elastic bodies.

H. SCHOTS: The square of squares. To form a magic square for which all lines, diagonal and orthogonal, are bimagic, requires  $64^2$  elements.

E. ANGLADE: Certain Laplacian sequences associated with a ruled surface.

R. GODEAU: Asymptotic lines and the equation of Lagrange.

S. DE BACKER: Viscous fluids and propagable waves.

J. P. BOSQUET: Propagation of acoustical energy in perfect fluids.

## Geneva

Society of Physics and Natural History of Geneva,  
February 4.

E. BRINER and E. PERROTTET: A method of analysis of very dilute ozone based on the catalytic action exercised by this gas in the oxidation of aldehydes. The method has the advantage that its sensibility increases with the dilution of the ozone.

AUG. LOMBARD: A new sheet of lower Cretaceous at Voirons (Préalpes externes, Haute-Savoie). The author describes a layer of fossiliferous limestones of Hauterivian-Barremian age situated in the Lucinge region at Voirons. This layer is connected with the lower series of sheets of the same age and of the same known facies at Hivernages, connected with the sheet of the external Préalpes. It helps to fix more exactly the limit of the autochthonous molasse of the ultra-Helvetic series drifted in the neighbourhood of Lucinge.

ARN. PICTET and MELLE A. FERRERO: A new factor for the agouti coat dissociated in the segregation of an interspecific crossing of guinea pigs. The authors have studied the genetics of the difference of coloration of the coat in a cross between the domestic and wild guinea pig. As the result of crossing, these two species can acquire new types of coat, previously non-existent in them. Moreover, when the same factor exists in the two species, its intensity increases in the descendants.

ARN. PICTET: The localization of the factors of heredity in ventral and dorsal areas. The author, after observing a mutation evident in the result of a crossing of wild and domestic albino guinea pigs, has been able to prove that the albino possesses in the latent state all the coloration factors and that it carries the same independent areas of variegation as the non-albinos studied. Hence the albino is a mosaic of dominant variegated areas invisible to the eye and albino areas.

## Rome

Royal National Academy of the Lincei (*Atti*, 24, 3-43; 1936).

M. DE FRANCHIS: Proof of the fundamental theorem on hyper-elliptical surfaces.

G. MARLETTA: Property of the second angle of Green.

B. CALDONAZZO: Ballast effects due to a couple of sources.

G. ARRIGHI: Oscillations about configurations which have motions of pure permanent rotation.

M. AIROLDI: *Pelagosite* as a member of a new genus of calcareous alga.

V. BAMBACIONI-MEZZETTI and A. SUARDI: First observations on the importance of cotyledons for the new formation of roots on hypocotyls of *Lupinus albus* L. and of *Vicia villosa* (Roth.).

G. GOIDANICH: Causes of the so-called vernal defoliation of the poplar in northern Italy.

G. DRAGONE-TESTI: Germination of the embryos of maize detached from the caryopsis and deprived of the scutellum in presence of polyoses containing fructo-furanose.

H. BYTINSKI-SALZ: Development of the tail in Amphibia (1). Experiments on isolation and defects.

E. PLATANIA: Nature of the peritrophic membrane of *Reticulitermes lucifugus* Rossi.

(*Atti*, 24, 45-97; 1936).

G. ROVERETO: Panoramic analysis in the geomorphical description of Liguria.

U. CASSINA: New graphical construction of the osculatory plane.

G. PALOZZI: Projective-differential geometry of new lattices of ordinary space.

G. BERNARDINI and D. BOCCIARELLI: Energy and intensity of groups of neutrons emitted by  $Po + Be$  (1).

G. CHARRIER and E. GHIGHI: Oxidation decomposition of 4-phenyl-1, 9-benzanthrone-10 with (1) a solution of chromic anhydride in acetic acid and (2) an alkaline solution of potassium permanganate.

E. GHIGHI: Decomposition of isodibenzanthrone (isoviolanthrone) by oxidation with an alkaline solution of potassium permanganate.

H. BYTINSKI-SALZ: Development of the tail in Amphibia (2). Changes of the correlations between the regions constituting the tail rudiment and the behaviour of the ectoderm of the caudal fin.

V. FAMIANI: Content of vitamin B<sub>1</sub> in grain compared with the international standard for the same vitamin.

A. SALVATORI: Chlorine content of the albino rat in relation to age.

## Vienna

Academy of Sciences, January 28

I. W. BREITENBACH and H. RUDORFER: Heat of polymerization of styrol in solution.

HANS STROUHAL: Zoological expedition to the Ionic Isles and the Peloponnesus (18). *Isopoda terrestria*: Armadillidiidæ, Armadillidæ.

HERMANN EICHLER: (1) New laws of colour indicators. (2) Catalytic synthesis of resazurin.

WERNER v. KOPPENFELS: Hypergeometric integral as a period of the quadrilateral representation.

FRANZ BUKATSCH: Influence of the thermal waters of Bad-Gastein on the assimilation of carbon dioxide by different water plants.

February 18.

ERWIN KAMPTNER: Inactive spores of marine coccolites.

ALFRED LEIMDÖRFER: Experimental study of the central regulation of the sugar in the blood.

M. PESTEMER and T. LANGER: Ultra-violet absorption of binary mixtures of liquids (10). The system benzene-heptane.

Z. HERRMANN and CH. SLONIM: Constituents of the Leclanché cell.

W. J. MÜLLER and JANET ZAPH BRIGGS: Theory of passivity (31). Passivity of chromium.

W. J. MÜLLER: Theory of corrosion (7). Relation between electrode potential, corrosion and corrosion passivity of metals in aqueous solution.

FRANZ WERNER: Data of fourth zoological expedition in the Ægean Archipelago.

VIKTOR PIETSCHMANN: New local form of *Cobitis taenia* L. (Cyprinoidea), *Cobitis taenia tessellatus*.

ANTON SKRABAL and ADOLF BERGER: Determination of the dissociation constant of hypochlorous acid by a kinetic method.