

## University Events

CAMBRIDGE.—At Trinity College, the electors to the Wyse studentship in social anthropology have awarded a studentship of £300 for three years to Gregory Bateson, of St. John's College.

It is announced by the Philosophical Society that the adjudicators for the Hopkins Prize for the period 1930-33 have awarded the prize to Prof. P. M. S. Blackett, for researches on cosmic radiation.

ST. ANDREWS.—At the graduation ceremonial to be held on June 30, the honorary degree of LL.D. is to be conferred on the following, among others: Dr. W. O. Kermack, Royal College of Physicians, Edinburgh; Dr. Angus MacGillivray, ophthalmic surgeon, Dundee; and Sir Arthur Rose, chairman of the Carnegie Trust for the Universities of Scotland.

## Societies and Academies

### Paris

Academy of Sciences, March 8 (*C.R.*, 204, 733-828).

MARCEL GODCHOT and M<sup>lle</sup>. GERMAINE CAUQUIL: The molecular transpositions obtained in the dehydration of 4-methylcyclohexylisopropylpinacone.

N. GUNTHER: Nuclei of the Fourier type.

LUCIEN MALAVARD and JOSEPH PÉRÈS: The corrections for the walls in the case of a tunnel of elliptical section.

ALBERT MÉTRAL and FRANÇOIS RAYMOND: A method of measuring the resistance exercised by the air on a railway train.

JEAN DUFAY: Nitrogen lines in the spectra of comets.

JEAN ROUBAUD-VALETTE: The equations of the photon.

RENÉ DUGAS: Quantum mechanics and the last multiplier according to Jacobi.

ERNEST BAUMGARDT: The ultra-sound yield of piezo-electric quartz.

NICOLAS KÜRTE, PAUL LAINÉ and FRANZ SIMON: Experiments on the thermodynamic scale of temperature below 1° K. Results of experiments by the method of adiabatic demagnetization using the large Bellevue magnet.

DOUCHAN AVSEC and MICHEL LUNTZ: Some new forms of electro-convective vortices.

M. HAÏSSINSKY and M<sup>me</sup>. H. EMMANUEL-ZAVIZZIANO: The preparation of thin layers of titanium by the electrolytic method. Details of a method of preparing thin films of metallic titanium on a lead cathode, of a thickness about 0.1-0.2 mgm./cm.<sup>2</sup>.

PIERRE MESNAGE: The molecular emission spectra of some metallic salts. Description of results obtained with manganese chloride, ferrous bromide and ferrous iodide.

M<sup>lle</sup>. HOÀNG THI NGA: The photo-voltaic effects of the naphthalene diamines.

MARCEL CHATELET: The partial precipitation of cobalt by ammonia in excess and the formation of cobaltammine ions.

J. BÉNARD and GEORGES CHAUDRON: The preparation of ferrites by the substitution of ferrous ions in magnetite.

RENÉ DELAPLACE: A method of analysis of saturated and unsaturated gaseous hydrocarbons under very low pressures. Application of the method of fractional distillation of the liquid gases under low pressures, with subsequent separation of the saturated and unsaturated gases by chemical means.

JENS BOE and M<sup>lle</sup>. MADELEINE GEX: Modifications of the spectra of aqueous solutions of phenylpyruvic acid as a function of the pH and of the time.

ALBERT PORTEVIN and PIERRE CHEVENARD: The cooling transformations of steels.

MARCEL PRETTRE: The heterogeneous combustion of mixtures of carbon monoxide and oxygen on a vitreous surface.

JEAN BARON and PAUL LAFFITTE: The influence of nitrogen on the inflammation of diethylether. The results obtained for the variations of the temperature of inflammation of mixtures of ether, oxygen and nitrogen produced by varying the proportion of nitrogen present are in agreement with the theory of chain reactions.

CHRISTIAN AALL: The influence of the impurities silica, alumina and magnesia on the melting point of calcium carbide. The experimental results are given graphically: the curves showing the lowering of the melting point have not the same form.

M<sup>lle</sup>. DENISE HIBERT and CLÉMENT DUVAL: Cobaltic chloride. Of various methods available, the best consists in treating a suspension of cobaltic oxide in ether with dry gaseous hydrochloric acid, afterwards removing the ether and excess of acid with a current of dry air.

RENÉ SUTRA: The formation of acetone derivatives of the mercaptals.

M<sup>lle</sup>. SIMONNE CAILLÈRE: A special mode of alteration of anorthite and a calcium variety of thomsonite.

MARCEL GIGOUT: The Palaeozoic series of Adrar n'Dgout (Marrakech Atlas).

EDMOND SAURIN: The Trias of the Phu-Tinh-Gia sheet (North Annam).

LÉONCE JOLEAUD: The very recent morphological evolution of a group of archaic Ungulata, the Damans.

FRÉDÉRIC MARIE BERGOUNIOUX: The faunal relations between the fossil Chelonians of Spain and France.

PIERRE DANGEARD: The zones of marine Algæ of western Morocco.

PAUL DE GRAEVE: The evolution of puric nitrogen during germination.

HENRI GAUSSEN: Young forms and future evolution.

M<sup>lle</sup>. FERNANDE FLOUS: The transmission of characters in the hybrids of firs.

CONSTANTIN DAWYDOFF: A new metanemertean belonging to a purely marine group, from the Grand Lac of Cambodia.

LÉON BINET and M. V. STRUMZA: Variations of the resistance to anoxhæmia according to the degree of narcosis.

LÉON KÉPINOV: Synergy of adrenalin and of the pituitary hormone. The mechanism of the glycolytic action of adrenalin.

ANDRÉ PAILLOT: The polyembryonic development of *Amicroplus collaris*, a parasite of the larvæ of *Euxoa segetum*.

M<sup>me</sup>. VÉRA DANTCHAKOFF: The effects of sexual determinism in a feminized male.

ANDRÉ DOGNON, WLADISLAS KOPACZEWSKI and STANISLAS MARCZEWSKI: The absorption of ultra-violet rays by the serum and anaphylaxy.

M<sup>me</sup>. RAYMONDE DUVAL and JEAN MARIE LE GOFF: The detection of small quantities of cobalt in human urine. The cobalt is concentrated by electrolysis and detected by the  $\alpha$ -nitroso- $\beta$ -naphthol reagent.

NICOLAS BEZSSONOFF and Mlle. MÉLANIE WOLOSZYN: The duality of the oxidized forms and the polarization of vitamin C shown by two reversible reactions with phosphomolybdic acid.

LÉOPOLD NEGRE and JEAN BRETEY: The anti-tuberculous immunization of the ape by injection of tubercle bacilli from smooth colonies.

FERNAND ARLOING, ALBERT MOREL and ANDRÉ JOSSERAND: New researches on the action towards cancers of the soluble organo-metallic complex compounds of ascorbic and dehydrascorbic acids, where the iron is replaced by copper or titanium.

JEAN NAGEOTTE: Remarks on the surgical repair of losses of traumatic substances of the peripheral nerves.

#### Amsterdam

Royal Academy (*Proc.*, 40, No. 2, 1937).

F. K. T. VAN ITERSOM: Separation of substances by flotation. Mathematical treatment which shows that the greater the angle of contact the better the flotability of a substance.

J. A. SCHOUTEN: The differential geometry of groups of contact transformations (1). Doubly homogeneous treatment of contact transformations.

F. M. JAEGER: The relative and absolute spatial configurations of isomorphous optically active complex salts (2). Comparison of the tri-diamino salts of cobalt, rhodium and chromium.

F. M. JAEGER and L. BIJKERK: Investigations on the complex salts of the racemic and optically active cyclohexanediamines with trivalent cobalt and rhodium (2). The complex tricyclohexanediamine rhodium salts.

A. H. BLAAUW and Miss H. G. KRONENBERG: The epoch of the flower formation of the hyacinth and Darwin tulip in Holland and in southern France.

C. S. MEIJER: Products of Whittaker functions.

J. POPKEN: An arithmetic property of certain integral functions.

J. A. BARRAU: Self-projective point-casts in space.

A. L. T. MOESVELD: Fundamentally wrong methods for establishing the non-existence of polymorphy.

J. H. C. MERCKEL: Relations between the melting points, boiling points and critical magnitudes and the number of carbon atoms in homologous series.

C. H. ANDREAS: Plant growth hormone and growth of the aerial roots of *Vitis gongyloides*.

F. FLORSCHÜTZ: Palæobotanical investigation in connexion with a supposed human settlement on the plateau of the Belgian peat moor (Houtes Fagnes).

H. D. M. BURCK: Fauna of the Bartonian in Eastern Holland.

G. H. VOORWIJK: Foraminifera from the upper Cretaceous of Havana, Cuba.

A. E. WALKER: Experimental anatomical studies of the topical localization within the thalamus of the chimpanzee.

W. J. ROBERTS: Detection of gold in the brain and in the fetuses of animals injected with sanocrysin.

F. KRÜGER: "Cellophane" as a substitute for kymograph paper.

A. DE BUCK: Some observations on the salivary and stomach secretion of *Anopheles* and other mosquitoes.

C. VISSER: A certain class of conformal mappings.

#### Cracow

Polish Academy of Science and Letters,  
January 11.

ST. LORIA and J. KLINGER: The diffraction of electrons of average velocity.

TH. BANACHIEWICZ: The calculation of determinants with the aid of Cracovians.

L. CHROBAK and J. CHOJNACKI: The striped spots of Laue radiograms. The lines on the spots of the Laue photographs are due to the characteristic spectrum emitted by the anticathode.

K. DZIEWONSKI, W. GUMULKA and J. MOSZEW: New studies on compounds of the type of 2-aryl-4-amino or 4-hydroxyquinolines.

J. LILPOP: New plants from the Permo-Carboniferous in Poland.

MME. J. JANISZEWSKA: The third and fourth stage of the development of the larvæ of *Contractacus aduncum* of the intestine of the flounder.

L. W. WISNIEWSKI: The evolutive cycle and biology of *Parafasciolopsis fasciolamorphæ*.

M. GATTY-KOSTYAL, MME. M. PASZKOWSKA and Z. ZAKRZEWSKI: The influence of certain plant substances on the growth of grafted tumours. The aqueous extract of the tissues of a representative of the family Polyporaceæ, of species not yet exactly defined, has an intense inhibitive action of grafts of sarcoma on mice and rats.

H. GROSSFELD: Metabolism and amœboid movement. The conditions producing visible amœboid movements in the Metazoa.

#### Moscow

Academy of Sciences, *C.R.*, 4, No. 9, 1936.

M. KREIN: Differential oscillating operators.

P. KALANTAROV: Selection of a system of units for measuring electromagnetic and mechanical values.

M. KONDAKOVA and M. KACNELSON: 1-Ethyl-2-methyl-valeric acid.

M. KACNELSON and B. DUBININ: Researches in the series of normal acids with long chain closed by a cyclohexyl or a cyclopentyl (1). Cyclohexylvaleric acid and its derivatives.

M. KACNELSON and M. KABAČNIK: Some derivatives of lupinine.

M. KACNELSON and J. L. GOLDFARB: Synthesis of the furanic isomer of cocaine (methyl ester of 2-furoylegonine).

M. P. GERČUK and M. KACNELSON: Preparation of anhydrides of naphthenic acids.

G. ČELINEV and E. OSETRVA: Amide condensations. Preparation of benzoylacetone by condensation of *N,N*-diphenylacetamide with acetophenone.

CH. S. KOŠTOJANC and T. I. BEKBULATOV: Comparative study of the importance of respiratory rhythm for the condition of the central nervous system.

A. A. ISAKOVA: The problem of the nature of the action of bacteriorhizal micro-organisms on plants. The action of the micro-organisms is of the hormonal type.

T. I. PRIVOLNEV: Respiratory rhythm during the segmentation of eggs of *Lampetra fluviatilis*.

G. A. SCHMIDT: (1) Development of the external gills from the ectoderm in Anura and from the entoderm in Triton. (2) Differences in the induction abilities of the organizing centre in Urodela and Anura.