

University Events

ABERDEEN.—The King has, on the recommendation of the Secretary of State for Scotland, approved the appointment of Prof. John Stirling Young, professor of pathology in the Queen's University, Belfast, to be regius professor of pathology, in succession to Prof. T. Shennan, who has resigned.

CAMBRIDGE.—D. V. Davies and Dr. W. R. M. Morton have been appointed University demonstrators in the Department of Anatomy.

At Gonville and Caius College, Prof. J. A. Ryle, regius professor of physics, has been elected into a professorial fellowship.

At Pembroke College, W. E. Burcham, Trinity Hall, has been elected into the Stokes studentship for research in physics. Mr. Burcham is engaged in research work in the Cavendish Laboratory.

At St. John's College, Prof. H. A. Harris, professor of anatomy, has been elected into a professorial fellowship.

LONDON.—The Court of the University has accepted an offer of the Harry Price Library of Magical Literature to be on permanent loan in the University Library, and has passed a vote of thanks to Mr. Harry Price for the benefaction.

Dr. F. E. Zeuner has been appointed hon. lecturer in geochronology at the Institute of Archaeology.

Societies and Academies

Paris

Academy of Sciences, December 28 (*C.R.*, 203, 1477–1556).

LOUIS BLARINGHEM : A new variety of *Zea Mays* with mahogany-coloured seeds.

GABRIEL BERTRAND and LAZARE SILBERSTEIN : New researches on the comparative amounts of sulphur, phosphorus and nitrogen in plants cultivated on a given soil. Figures are given for fifteen species of plants. Exceptional results were obtained with celery : whilst in forty-six species of plants the ratio sulphur to phosphorus did not exceed 4.02, celery gave a ratio of 11.1.

CHARLES POISSON : Some magnetic rocks in the neighbourhood of Tananarive.

ALEXANDRE MYLLER : The mean torsion of a surface.

ALBERT EDREI : Certain limit invariants of integral series.

VICTOR LALAN : Kinematics and the theory of groups.

OCTAV ONICESCU : Physical laws expressed by statistical chains.

GEORGES FOURNIER : The upper limit of the atomic numbers. On the basis of certain geometrical assumptions, 136 would be the maximum atomic number.

PIERRE JOLIBOIS and ROBERT BOSSUET : Some properties of a spark arising from the surface of an electrolyte connected to the negative pole.

GEORGES COSTEANU and PIERRE BARCHIEWITZ : The absorption spectrum of ammonia in the very near infra-red (6000 Å.–9500 Å.).

JEAN LECOMTE : Infra-red absorption spectra and the modes of vibration of organic compounds possessing an ethylene linkage.

JOSEPH BERTHENOD : Connexions by means of couplings with permanent slipping.

RENÉ DELAPLACE : The thermal conductivity of the gaseous saturated hydrocarbons at low pressure.

Results for hydrogen, methane, ethane, propane, normal butane and isobutane are given as curves. For pressures between 0.001 mm. and 0.2 mm. of mercury, the homologues of methane have thermal conductivities increasing with their molecular weights.

WILFRIED HELLER : The slowing down of thixotropic solidification by the amino-acids.

JEAN CHÉDIN : The quantitative study of the intensity and the depolarization of some Raman lines emitted by sulphonitric mixtures.

PIERRE PEYROT : Absolute measurement of the light diffused by liquid benzene.

ALBERT PORTEVIN and EUGÈNE HERZOG : The action of various additions in small proportions on the marine corrosion of extra-mild steel. Results are given graphically of the effects of the presence of aluminium, chromium, nickel, silicon and phosphorus.

PAUL LAFFITTE and ANDRÉ PARISOT : The detonation of ammonium nitrate. Summary of results obtained by the photographic recorder method.

LOUIS MÉDARD and FRANÇOIS DÉGUILLON : The Raman effect of some organic sulphur compounds.

RAYMOND DELABY : The β -ethylenic nitriles and some of their derivatives.

LÉON PALFRAY, SÉBASTIEN SABETAY and PIERRE MASTAGLI : The reducing action of benzylalcoholic potash and of sodium benzyolate on aldehydes. Studies on three aldehydes of different type, cuminic, cenanthic and α -amyleinnamic aldehydes.

GUSTAVE VAVON and ISRAËL CHILOUET : The structure of the menthylamines.

ALBERT KIRRMANN and ROBERT JACOB : Study of the allyl transposition : a trichlorisobutene.

ROBERT FERRER : The intensity of the orbital interaction in salts. The factor of the ions.

Mlle. VERA MALYCHEFF : Contribution to the study of the soils of western Morocco. The brown soil formed at the expense of hamri.

RAYMOND JOUAUST, ROBERT BUREAU and LOUIS ÉBLE : The probable causes of the sudden fading of short radio-electric waves and their relation with magnetic phenomena. There is no evidence to connect these disappearances with magnetic storms.

PIERRE MARIE : The utilization of the Foraminifera in stratigraphy.

ROBERT LEMESLE : The vessels with scalariform perforations of *Eupomatia* and their importance in the phylogeny of Polycarps.

LÉON BERTIN : A series of *Leptocephalus* belonging to the genus *Saccopharynx*.

MME. YVONNE KHOUVINE, BORIS EPHRUSSI and MORRIS HENRY HARNLY : The extraction and solubility of substances intervening in the pigmentation of *Drosophila melanogaster*.

ANDRÉ KLING and GUY LECORDIER : The influence exerted by two war vesicants and by their products of hydrolysis on the values of the interfacial tensions of lipids towards physiological serum and on their absorption.

Mlle. LISE EMERIQUE : Avitaminosis A and nitrogen metabolism.

MME. MARGUERITE AITOFF : The transformations of the fermentation reactions of a dysenteric bacillus by passage through animals.

MAX ARON : Serological researches on the nature of the principle contained in the urine of cancer patients.

JEAN CUILLE and PAUL LOUIS CHELLE : Can the disease known as "tremblante du mouton" be inoculated ? This disease is infectious and inoculable. The virus exists in the nerve centres.

Cape Town

Royal Society of South Africa, October 21.

G. D. B. DE VILLIERS and S. M. NAUDE: Effects of oil sprays on the transpiration of peach twigs. Oil sprays diminish the transpiration of twigs by about fifty per cent. Twigs sprayed with oil build up a greater reserve of sap than the unsprayed twigs. Hence when the buds open up, less danger exists of their drying out and the phenomena of delayed foliation and die-back occurring. Screening tends to decrease the transpiration in comparison with an unscreened tree. Such trees, sheltered from the sun's rays in winter by screens or windbreaks, develop more normally than unsheltered trees.

I. DONEN: Studies in deciduous fruit. (4) Distribution of nitrogenous fractions in the pulp of the Kelsey plum (*Prunus salicina*). Extracts of the nitrogenous fraction in the pulp of Kelsey plums were obtained by (a) water extraction of fresh tissue, (b) alcoholic extraction of frozen tissue, (c) expressing the juice, and (d) water extraction of pulp dried at 50° C. In young fruit, preservation of the tissue by freezing or drying resulted in hydrolysis of protein. In mature fruit the distribution of total soluble nitrogen, amide, amino acid and ammonia nitrogen, in the resulting extracts is not greatly affected by any of the methods of extraction used. (5) Preliminary observations on the relationship between nitrogenous metabolism and internal breakdown of Kelsey plums in cold store. Changes in the proportions of protein and non-protein nitrogen as well as changes in the ammonia, amino and amide nitrogen fractions in the flesh of Kelsey plums were followed by analysis of fruit stored at 35°, 50° and 70° F. Rapid hydrolysis of proteins takes place in plums under all conditions of storage, but the course of protein hydrolysis stops short at the amino-acid nitrogen stage. Conditions of maturity and storage which interfere with the course of progressive breakdown of nitrogenous compounds are also the conditions which interfere with the normal ripening of the fruit.

W. E. SHARPLES: A Middle Stone Age site at Tygerberg, near Prince Albert.

T. A. STEPHENSON, A. STEPHENSON and C. A. DU TOIT: The South African inter-tidal zone in its relation to ocean currents. (1) A temperate Indian Ocean shore.

H. ZWARENSTEIN: Experimental induction of ovulation (see NATURE, Jan. 16, p. 112).

B. F. J. SCHONLAND, D. B. HODGES and H. COLLENS: Combined oscillographic and camera studies of lightning. The leader process in all cases observed lowers a negative charge towards ground. The stepped leader involves an intermittent decrease of negative electric moment with corresponding radiation in the form of a ripple which always precedes the main radiation field caused during the return stroke. The dart leader process involves a continuous decrease in moment. Discharges taking place in a thundercloud are less important sources of atmospherics than those passing to ground.

Cracow

Polish Academy of Science and Letters, November 9.

M. PETROVITCH: Remark on the zeros of the Laplace-Abel integrals.

L. KOZLOWSKI: Kerr's electro-optical phenomenon in mixtures of nitrobenzene and hexane. For

mixtures of low concentration, the relation between the Kerr coefficient and temperature is nearly linear. There is an anomaly in the region of the critical temperature of solution.

M. CENTNERSZWER and M. BLUMENTHAL. (1) The thermal dissociation of lithium nitrate. Lithium nitrate, at a temperature above its melting point, decomposes into lithium nitrite and oxygen. The reaction is reversible, and the author has determined the Nernst equation. (2) The thermal dissociation of silver nitrate.

H. LICHE: Observations on the behaviour of the Gerrides (heteropterous Hemiptera).

M. BULAWA: The lymphatics in the skin of the teleosteans.

Moscow

Academy of Sciences (C.R., 4, No. 1; 1936).

W. SIERPINSKI: Semi-continuous functions.

P. P. LAZAREV and Z. V. BOULANOVA: (1) The influence of muscular work on the adaptation in peripheric vision. (2) Changes in the peripheric visual adaptation in infants during a day.

P. P. LAZAREV and M. R. SEMENOVYCH: Changes in the peripheric visual adaptation during a year.

A. OBRUCHEVA and A. FRUMKIN: Attainment of a potential by platinum in solutions of silver salts.

I. A. GOLJANICKIJ and I. S. BELONOSOV: Reduction of the inactivated *l*-ascorbic acid.

O. S. VIALOV: Classification of oysters (*Ostreinae*). A. S. SEREBROVSKIJ: Second variant of the M - σ^2 -triangle method.

E. ŠESTAKOV and L. I. SERGEEV: Changes in the permeability of protoplasm and the dynamics of frost resistance of winter cereals in connexion with their passage through the light stage.

E. G. ANDREEVA: The proportions of the leg bones of some *Bovinae*.

A. J. BAZIKALOVA: A new form of Amphipoda from Lake Balkal (*Gammarosphaera insularis*, gen. et sp. n.).

Vienna

Academy of Sciences, October 29.

STEFAN MEYER: Possible existence of an isotope of polonium in the thorium series.

ERICH TSCHERMAK-SEYSENEGG: True, derived, and doubtful wheat-rye hybrids (wheat-like forms).

RUDOLF INZINGER: Infinitesimal geometry of contact transformations.

W. J. MÜLLER: Theory of metal potentials (1).

L. KAHOVEC and A. W. REITZ: Studies of the Raman effect (61). Raman spectra of organic substances (benzene derivatives).

November 5.

OTTO AMPFERER: Were the Alps unglaciated between the Würm and the final glacial periods?

ZORA KLAS: *Thiosiphon*, a new species of sulphur bacterium.

FRANZ URBACH and HELENE SCHLESINGER: Mechanical and acoustical tests of pianofortes.

ANTON KAILAN and WALTER MELZER: Influence of neutral salts on velocity of esterification and viscosity in solutions of hydrochloric acid in ethyl alcohol.

MAX TOPERCZER: The earthquake at Obdach on October 3, 1936.