

J. Gilles: The intensities of the components of the hyperfine structure of the most intense lines of the visible spectrum Hg I. The hyperfine structure of the term (Hg 199) 7^2D_3 .—J. Durand and E. Raguin: The granite of the region of Pinet (Aveyron).—D. Montet: The action of radioactivity in plant physiology. The experimental conditions necessary to prevent confusion between the effects of catalysis and radioactivity are indicated. The use of a salt possessing manurial effects, such as a nitrate, should be avoided.—René Petit: The magnification of correcting glasses.—F. Vies and A. de Coulon: New experiments on the rôle of the electrostatic conditions in the appearance of spontaneous cancers in mice.

WASHINGTON, D.C.

National Academy of Sciences (*Proc.*, 18, 525-565, Aug. 15, 1932).—Lester S. King and Clyde E. Keeler: Absence of corpus callosum, a hereditary brain anomaly of the house mouse. Preliminary report. The character segregates sharply, is probably inherited as a unit character, is not sex-linked and is not due to the presence of the rod-less gene.—T. R. Hogness and R. Ruth Comroe: A search for evidence of the radioactive decomposition of barium. Working on the idea that barium might dissociate into xenon and helium, five rock specimens, all probably of Palaeozoic age, were disintegrated and the residual gases examined. No xenon was found spectroscopically. By the method used, 10^{-7} c.c. or about 3×10^{12} atoms of xenon could have been detected. Hence it is calculated that, if barium is radioactive, its half-life period is not less than 10^{15} – 10^{18} years.—W. H. Rodebush and W. C. Klingelhoefer: The reaction of chlorine with hydrogen. Atomic chlorine has been prepared and its reaction with hydrogen gas investigated at low temperature.—James H. Hibben: An investigation of intermediate compound formation by means of the Raman effect. Evidence was obtained for the formation of compounds in solution between aluminium chloride and ethyl alcohol, and zinc chloride and methyl alcohol, and for polymerisation of aluminium chloride in water.—Sylvia M. Mills: (1) Double innervation of melanophores. When an area on a specimen of *Fundulus heteroclitus* was denervated, a few of the melanophores which expand over a black background fail to contract over white. Response to electrical and mechanical stimulation also suggests double innervation.—(2) Neuro-humoral control of fish melanophores. The melanophores of a denervated region show a progressive lag, greatest at the centre of the region, in their responses to stimulation. Similar results were obtained with an isolated tail. It is suggested in explanation that melanophore nerves, when stimulated, produce a secretion causing melanophore contraction; this secretion is probably not carried in the blood system.—Arthur Bramley: Gamma radiation. A theoretical discussion using an oscillator which accounts for the needle-like character of the radiation field for very high frequencies.—Chester Stock: An Upper Oligocene mammalian fauna from southern California. The fauna of the Sespe beds of Kew Quarry, which occurs to the west of the Simi Valley, Ventura County, California, is more advanced than that from the Sespe beds north of the Simi Valley (*NATURE*, 130, 675, 1932). Its age is considered to be not later than Lower Miocene or earlier than Upper Oligocene.—A. D. Michal and J. L. Botsford: (1) An extension of the new Einstein geometry. Developments of the paper by Einstein

and Mayer on "Unified Field Theory" (1931).—(2) Simultaneous differential invariants of an affine connexion and a general linear connexion.—S. S. Wilks: The standard error of a tetrad in samples from a normal population of independent variables. An exact expression is derived but it is said to lead to very complicated results.

Forthcoming Events

MONDAY, Nov. 14

UNIVERSITY OF LEEDS, at 5.15.—Prof. H. H. Swinerton: "Fossil Clues and Hereditary Problems".
ROYAL GEOGRAPHICAL SOCIETY, at 5.—"Early Maps of Great Britain". E. Heawood: "The Tschudi Map"; Miss J. B. Mitchell: "The Matthew Paris Maps"; R. A. Pelham: "The Gough Map".

TUESDAY, Nov. 15

CHADWICK PUBLIC LECTURE, at 5.15—(at the Royal United Services Institution, Whitehall).—Sir Pendrill Varrier-Jones: "The Employment of Tuberculous Patients".
BRITISH INSTITUTE OF PHILOSOPHY, at 8.15—(at University College, Gower Street, W.C.1).—Sir Arthur Eddington: "Physics and Philosophy".
UNIVERSITY COLLEGE, LONDON, at 5.30.—Prof. E. J. Garwood: "Kangchinjunga".
BRITISH PSYCHOLOGICAL SOCIETY, at 8.30.—A. H. Seymour: "The Borderland between Education and Industry".

WEDNESDAY, Nov. 16

BRITISH ACADEMY, at 5—(Annual Lecture on a Mastermind).—Prof. James Gibson: "Locke".
ROYAL METEOROLOGICAL SOCIETY, at 5.—J. Edmund Clark, I. D. Margary, R. Marshall and C. J. P. Cave, "Report on the Phenological Observations in the British Isles, December 1930 to November 1931".
ENTOMOLOGICAL SOCIETY OF LONDON, at 8.30.—Discussion on "The Law of Priority in Nomenclature," to be opened by Prof. W. A. F. Balfour-Browne.

THURSDAY, Nov. 17

CHEMICAL SOCIETY, at 8.—Discussion on "Combustion of Gases in Electric Discharges", to be opened by Prof. G. Ingle Finch.
BEDFORD COLLEGE FOR WOMEN, at 5.15—(Stevenson Lecture).—Sir Josiah Stamp: "The Relation of Finance to Rationalisation".
UNIVERSITY COLLEGE, LONDON, at 5.30.—Sir Charles Sherrington: "Reflex Action" (succeeding lecture to be announced later).

FRIDAY, Nov. 18

ROYAL INSTITUTION, at 9.—Dr. R. G. Canti: Cultivation of Living Tissue Cells".

Official Publications Received

GREAT BRITAIN AND IRELAND

Report for 1931 (No. 40) on the Lancashire Sea-Fisheries Laboratory at the University of Liverpool and the Annual Report of the Marine Biological Station (No. 45) at Port Erin, Isle of Man. Edited by Prof. James Johnstone and Dr. R. J. Daniel. Pp. 169+7 plates. (Liverpool: University Press of Liverpool.) 6s.
Third Annual Reports of the National Radium Trust and Radium Commission, 1931-1932. Pp. 43. (London: H.M. Stationery Office.) 9d. net.
Air Ministry: Aeronautical Research Committee: Reports and Memoranda. No. 1471 (T.3247): A Flight Path Recorder suitable for Performance Testing. By R. P. Alston, D. A. Jones and E. T. Jones. Pp. 8+8 plates. 9d. net. No. 1473 (T.3250): Graphical Solutions for Inviscid Flow. By Dr. H. F. Winny. Pp. 16+4 plates. 1s. net. No. 1462 (Strut. 68): Method of Testing Strength and Stiffness of Large Wing. By I. J. Gerard. Pp. 5+5 plates. 6d. net. No. 1467 (T.3255): Applications to Aeronautics of Ackeret's Theory of Aerofoils moving at Speeds greater than that of Sound. By Prof. G. I. Taylor. Pp. 7+5 plates. 6d. net. (London: H.M. Stationery Office.)