

of G. Frobenius and of V. Turkin. A. P. DIETZMANN and A. A. KULAKOV: Some criteria of non-simplicity of finite groups. W. FEDOROV: Uniform functions. S. SHUBIN: Application of the method of the Dirac density matrix to the theory of metals. G. LIANDRAT: Utilisation of a selenium photoelement for the measurement of the ultra-violet solar radiation in the region of 3200 Å. A. M. STEFANOVSKIJ, E. S. TATARSKIJ and N. V. ZELIAKOV: Dependence of the structure of ammonia catalyser upon the conditions of its reduction. V. G. FESENKOV: Photometric analysis of the luminosity of the night sky. N. S. FILIPPOVA: Isotopes of hydrogen in petroleum. P. LAZAREV: Ionic theory of the physiological action of short waves. A. N. PARSHIN: Extracts from the muscle tissue of dog and rabbit. V. P. NEKHOROSHEV: A find of Upper Palaeozoic marine deposits in the Zaisan basin. M. E. NEUHAUS: Data concerning crossing-over between the X and Y chromosomes in females of *Drosophila melanogaster*. B. K. STEGMANN: Distribution and geographical variation of *Saxicola torquata*.

#### ROME

Royal National Academy of the Lincei, April 28. G. ROVERETO: The Montenotte series as a constituent element of the Western Alps and of the Apennines. M. RENATA FABBRI: Differentials of higher order. L. ROTH: The regularity of algebraic surfaces. E. CIANI: A sizergetic bundle of cubic surfaces (1). A. DE MIRA FERNANDES: Compound tensorial derivation in non-point spaces. TH. MOTZKIN: Some characteristic properties of convex ensembles. N. W. AKIMOFF: Considerations on propulsive efficiency. C. TOLOTTI: Typical case of dynamic universes endowed with complete symmetry about a centre. The field-equations of a universe showing complete symmetry about a point have been derived previously, the only hypothesis made being the existence of suitable co-ordinates with respect to which the propagation of light is isotropic. Further assumptions now made are that such isotropy holds with respect to substantial co-ordinates (connected with the moving matter) and that, in such co-ordinates, the velocity of light is independent of position. Under these conditions, the gravitational equations are shown to relate necessarily to a completely homogeneous universe. G. PICCARDI: The atmospheres of the planets. A hypothesis is advanced to explain the fact that the atmospheres of the planets near the sun are characterised by oxygen compounds and those of the more distant planets by carbon-hydrogen compounds. T. FRANZINI: The diffusibility of deuterium into metals. The displaceability of occluded hydrogen by an electric field is confirmed, and the absence of a similar effect with deuterium is shown. Further work is necessary to decide whether deuterium is adsorbed, but not absorbed, by palladium; or neither adsorbed nor absorbed; or absorbed, but not displaceable. R. MANZONI ANSIDEI: The Raman spectra of the isomeric nitrotoluenes. The measurements made confirm those published by Kohrausch, Dadiou and Jele in 1931. G. PICCARDI: (1) The spectrum of neodymium oxide vapour. (2) The spectrum of samarium oxide vapour. C. ACQUA: The nature of ultra-viruses. From a review of the evidence available, the conclusion is drawn that filterable viruses have an auto-catalytic action. A. MESSERI: The organising power of wood and of the primary phloem.

#### WASHINGTON, D.C.

National Academy of Sciences (*Proc.*, 21, 507-516, August). E. C. MACDOWELL, M. J. TAYLOR and J. S. POTTER: The dependence of protection against a transplantable mouse leukaemia upon the genetic constitution of the immunising tissue. Two strains of mice were used. Embryonic tissue from one strain induced resistance in all cases; that from the other failed to induce resistance in its own strain; embryonic tissue of hybrids of the two strains are as successful as the first. J. W. ALEXANDER: (1) On the chains of a complex and their duals. (2) On the ring of a compact metric space. ALFRED J. MARIA and ROBERT S. MARTIN: On the representation of positive harmonic functions. M. H. ELLIOTT and W. C. TREAT: Hunger-contractions and rate of conditioning. Hunger-contractions, visible in rats with stomachs transplanted to a position just below the skin, were found to coincide with periods of activity. Rats with such hunger-contractions were able to learn to respond to a conditioned stimulus (an electric light) more quickly than animals which had received food.

### Forthcoming Events

[Meetings marked with an asterisk are open to the public.]

Sunday, October 6

BRITISH MUSEUM (NATURAL HISTORY), at 3 and 4.30.—Miss M. R. J. Edwards: "Animals and Man".\*

Monday, October 7

BRITISH MUSEUM (NATURAL HISTORY), at 11.30.—J. Ramsbottom: "Fungi and their Mode of Life".\*

### Official Publications Received

#### Great Britain and Ireland

Department of Scientific and Industrial Research: Food Investigation. Leaflet No. 6: The Refrigerated Gas-Storage of Apples. By Dr. Franklin Kidd and Dr. Cyril West. Pp. 12. (London: H.M. Stationery Office.)  
Sixteenth Annual Report of the Ministry of Health, 1934-35. (Cmd. 4978.) Pp. xii+350. (London: H.M. Stationery Office.) 5s. 6d. net.

Transactions of the Royal Society of Edinburgh. Vol. 58, Part 2, No. 17: The Endodermis in Light-grown and Etiolated Shoots of the Leguminosae—A Contribution to the Causal Study of Differentiation in the Plant. By Dr. G. Bond. Pp. 409-425+1 plate. 2s. 6d. Vol. 58, Part 2, No. 18: Rare and New Ostracoderm Fishes from the Downtonian of Shropshire. By Prof. Leonard J. Wills. Pp. 427-447+7 plates. 5s. (Edinburgh: Robert Grant and Son; London: Williams and Norgate, Ltd.)

#### Other Countries

Veröffentlichungen des Geophysikalischen Instituts der Universität Leipzig. Serie 2: Spezialarbeiten aus dem Geophysikalischen Institut und Observatorium. Band 6, Heft 3: Temperaturverhältnisse und Windsystem eines geschlossenen Waldgebietes. Von Horst Günther Koch. Pp. 121-175+2 plates. Band 6, Heft 4: Die physikalische Arbeitsweise des Gallenkamp-Verdunstungsmessers und seine Anwendung auf mikroklimatische Fragen. Von Katharina Dörrfel. Pp. 177-222. Band 6, Heft 5: Instabile Schichtungen der Atmosphäre und ihre Bedeutung für die Wetterentwicklung im Königsberger Gebiet. Von Gerhard Siefert. Pp. 223-379+34 plates. (Leipzig: Geophysikalisches Institut der Universität.)

Zakład Astronomii Praktycznej Politechniki Warszawskiej (Institut d'Astronomie pratique de l'École polytechnique de Varsovie). Publication No. 13: Pomiar mikrofotometryczne gwiazdy zmiennej SU Draconis w latach 1931-1934 (Mikrophotometrische Messungen des veränderlichen SU Draconis in den Jahren 1931-1934). Napsali F. Kepiński i M. Kowalczewski. Pp. 18. (Warszawa: Politechniki Warszawskiej.)

Annales de l'Institut de Physique du Globe de l'Université de Paris et du Bureau central de Magnétisme terrestre. Publiées par les soins de Prof. Ch. Maurain. Tome 13. Pp. iii+144. (Paris: Les Presses universitaires de France.)

Report on the Zoological Survey of India for the Years 1932 to 1935. Pp. iii+lx. (Delhi: Manager of Publications.) 1.2 rupees; 2s.