

ming for a digital computer) IN THE DEPARTMENT OF AERONAUTICS AND ASTRONAUTICS for work in the field of hypersonic gas dynamics—The Secretary and Registrar, The University, Southampton.

SENIOR LECTURER (graduate in botany, agriculture or horticulture, with teaching and research experience at university level, and preferably a knowledge of tropical crops) IN CROP HUSBANDRY at the University College of the West Indies (Imperial College of Tropical Agriculture, Trinidad)—The Secretary, Inter-University Council for Higher Education Overseas, 29 Woburn Square, London, W.C.1.

SENIOR LECTURER OR LECTURER IN ORGANIC CHEMISTRY; a LECTURER IN INORGANIC CHEMISTRY; and an ASSISTANT LECTURER IN INORGANIC CHEMISTRY—The Academic Registrar, Loughborough College of Technology, Loughborough, Leicestershire, quoting Ref. 9/G.

SENIOR LECTURER (qualified to teach microbiology to final degree and Diploma of Technology standard) IN MICROBIOLOGY IN THE DEPARTMENT OF BIOLOGICAL SCIENCES—The Registrar (Department F), Bradford Institute of Technology, Bradford 7.

REPORTS and other PUBLICATIONS

(not included in the monthly Books Supplement)

Great Britain and Ireland

Government of Northern Ireland: Ministry of Agriculture. Leaflet No. 16: Feeding Dairy Cows. Pp. 15. Leaflet No. 84: Lime and Liming. Pp. 7. Leaflet No. 100: The Cultivation of Carrots. Pp. 8. Leaflet No. 107: Mineral Mixtures for Stock-Feeding. Pp. 4. Leaflet No. 142: Lead and Copper Poisoning. Pp. 4. (Belfast: Ministry of Agriculture, 1960 and 1961.) [72]

Notes on Process Selection and Filler/Electrode Materials. (Addendum 2 to Information bulletin 19.) Pp. 7. (London: The Aluminium Development Association, 1960.) [72]

Agricultural Research Council. Postgraduate Studentships and Fellowships offered in 1961. Pp. 20. (London: Agricultural Research Council, 1961.) [72]

Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom. Third Report of an *ad hoc* Committee on Procedure for Admission of Students. Pp. v+41. (London: Committee of Vice-Chancellors and Principals of the Universities of the United Kingdom, 1961.) 2s. 6d. [72]

Department of Scientific and Industrial Research: National Physical Laboratory. Notes on Applied Science No. 20: Small-Scale Preparation of Fine-Grain (Colloidal) Photographic Emulsions. By B. H. Crawford. Pp. iv+13+1 plate. (London: H.M. Stationery Office, 1960.) 1s. 6d. net. [72]

The Engineer Buyers Guide, 1961. Pp. 984. (London: Morgan Brothers (Publishers), Ltd., 1961.) 10s. [82]

English Electric Valve Co., Ltd. Abridged Valve Data. Pp. 38. (Chelmsford: English Electric Valve Co., Ltd., 1961.) [82]

The Consolidated Zinc Corporation, Ltd. Descriptive Booklet. Pp. 96. (London: The Consolidated Zinc Corporation, 1960.) [92]

Philosophical Transactions of the Royal Society of London. Series A: Mathematical and Physical Sciences. No. 1028, Vol. 253 (9 February, 1961): Ionization Fronts in Interstellar Gas and the Expansion of H II Regions. By F. A. Goldsworthy. Pp. 277-300. 7s. 6d. No. 1029, Vol. 253 (9 February, 1961): Ionization Fronts in Interstellar Gas: The Structure of Ionization Fronts. By W. I. Axford. Pp. 301-333. 10s. 6d. (London: Royal Society, 1961.) [92]

Liverpool Observatory and Tidal Institute. Annual Report, 1960. Pp. 20. (Liverpool: Liverpool Observatory and Tidal Institute, 1961.) [102]

Government of Northern Ireland: Ministry of Agriculture. Leaflet No. 82: The Production of Clean Milk. Pp. 19. Leaflet No. 146: The Growing and Harvesting of Ryegrass Seed. Pp. 4. (Belfast: Ministry of Agriculture, 1961.) [102]

Bulletin of the British Museum (Natural History). Botany. Vol. 2, No. 10: New Species of *Taraxacum* from the Himalayan Region. By J. L. van Soest. Pp. 261-273+plates 22-29. 10s. Zoology. Vol. 7, No. 4: A Revision of the Genus *Dinotroterus* Bigr. (Pisces, Clariidae), with Notes on the Comparative Anatomy of the Suprabranchial Organs in the Clariidae. By P. H. Greenwood. Pp. 215-241. 10s. (London: British Museum (Natural History), 1961.) [102]

Building Research Station Digest (Second Series), No. 7: Noise in the Home. Pp. 4. (London: H.M. Stationery Office, 1961.) 4d. [102]

University of Birmingham. Report of the Proceedings of the Council of the University for the year ended 31st December, 1960. Pp. 19. Accounts for the year ended 31st July, 1960. Pp. 35. Report of the Vice-Chancellor and Principal for the calendar year 1960. Pp. 35. University Research Committee—Thirty-first Annual Report (Session 1959-60). Pp. 137+1 plate. (Birmingham: The University, 1960, and 1961.) [102]

Agents of Cultural Advance. By Sir Aubrey Lewis. (L. T. Hobhouse Memorial Trust Lecture No. 30, delivered on 30 April, 1960, at University College, London.) Pp. 29. (London: Oxford University Press, 1961.) 5s. net. [102]

Other Countries

Ministry of Agriculture and Lands, Jamaica, W.I. Bulletin No. 57 (New Series): Investigations, 1956-1957. Pp. iii+139. 3s. 6d. Black Pepper: a Review of Cultural Practices and their Application to Jamaica. By J. F. Ward. Pp. i+13. Veterinary Division Extension Circular No. 61 (August, 1959): Swine Erysipelas. Pp. 7. (Kingston: Government Printer, 1959 and 1960.) [311]

United States Department of the Interior: Geological Survey. Professional Paper No. 365: Apparent Resistivity of a Single Uniform Overburden. By I. Roman. Pp. iv+99. (Washington, D.C.: Government Printing Office, 1960.) 70 cents. [311]

Koninklijk Nederlands Meteorologisch Instituut. Mededelingen en Verhandelingen. No. 67: Climatological Data of the Netherlands Light-Vessels over the period 1910-1940. By G. Verploegh. Part 3: Temperatures and Hydrometeors; Thunderstorms. Pp. 146. 18 florins. No. 74: Geostrophic Flow: Geostrophic Approximation in

the Upper Air Flow, with Application to Aeronavigation and Air Trajectories. By Dr. H. M. de Jong. Pp. 100. 5 florins. No. 75: A New Analysis of some Features of the 11-year and 27-day Cycles in Solar Activity and their Reflection in Geophysical Phenomena. By Dr. S. W. Visser. Pp. 65. 3.50 florins. No. 76: Fault Plane Mechanisms of Southeast Asian Earthquakes. By A. R. Ritsema and J. Veldkamp. Pp. 63. 4 florins. (De Bilt: Koninklijk Nederlands Meteorologisch Instituut, 1959 and 1960.) [12]

Bulletin of the Astronomical Institutes of the Netherlands. Vol. 15, No. 499 (1960, December 30): Methods for Computing the Original Orbits of Comets. By E. H. Bilo and H. V. van de Hulst. Definitive Elements for Comets 1905 IV (Kopff), 1941 VIII (vanGent), 1946 I (Timmers), and 1946 VO (Jones). By G. Pels. The Original Values of $1/a$ for 17 Cometary Orbits. By E. H. Bilo and I. Van Houten-Groeneveld. Pp. 119-164. Vol. 15, No. 500 (1960, December 30): Formation and Evolution of Clusters of Galaxies. By G. B. van Albada. Pp. 165-198. Vol. 15, No. 501 (1960, December 30): Three-Colour Photometry in the U, B, V System of 51 Northern Cepheids. By P. Th. Oosterhoff. Pp. 199-228. Vol. 15, No. 502 (1960, December 30): Dynamic Spectra and Polarization of Small Bursts in Solar Radio Emission. By T. de Groot. Pp. 229-236. Vol. 15, No. 503 (1960, December 30): Temperature Determinations for Nuclei of Thirteen Planetary Nebulae. By H. Zanstra. Stellar Temperature from HeI Emission and the Ultraviolet and Visual Star Spectrum. By L. H. Aller and H. Zanstra. Pp. 237-250. Vol. 15, No. 504 (1960, December 30): A.D.C. Amplifier for Photoelectric Photometry. By J. Borgman. Seven-Colour Photometry of O, B and A Stars. By J. Borgman. Pp. 251-263. (Leiden: Bulletin of the Astronomical Institutes of the Netherlands, 1960.) [12]

Annual Report of the Geological Survey Department, British Territories in Borneo for 1959. By F. W. Roe. Pp. xii+219+46 plates. (Kuching, Sarawak: Government Printer, 1960.) 3 Malayan dollars; 7s. [72]

University of Florida: Florida State Museum. Director's Report, 1959-1960. Pp. 19+2 plates. (Gainesville, Fla.: University of Florida, Florida State Museum, 1960.) [72]

Osservatorio Astrofisico di Arcetri, Firenze. Annuario per il 1961. Pp. 116. (Firenze: Osservatorio Astrofisico di Arcetri, 1960.) [72]

National Academy of Sciences—National Research Council—Subcommittee on Radiochemistry. NAS-NS 3013: The Radiochemistry of Beryllium. By A. W. Fairhall. Pp. v+58. (Nuclear Science Series.) (Washington, D.C.: Office of Technical Services, Department of Commerce, 1960.) 75 cents. [72]

United States Department of Agriculture. Farmers' Bulletin No. 2099: Control of Caterpillars on Commercial Cabbage and other Cole Crops in the South. By W. J. Reid, Jr., and F. P. Cuthbert. Pp. 24. (Washington, D.C.: Government Printing Office, 1960.) 15 cents. [72]

State of California: Department of Fish and Game. Marine Resources Operations. Fish Bulletin No. 109: The Barred Surfperch (*Amphistichus argenteus* Agassiz) in Southern California. By Jack W. Schott and Norman J. Abramson. Pp. 79. Inshore Fishes of California. By John L. Baxter. Pp. 80. 35 cents. (Sacramento, Calif.: State of California, Department of Fish and Game, 1960.) [72]

Fisheries Research Board of Canada. Bulletin No. 124: Antibiotics in Fish Preservation. By H. L. A. Tarr. Pp. v+24. (Ottawa: Queen's Printer, 1960.) 50 cents. [72]

Smithsonian Institution: United States National Museum. Bulletin No. 223: The Parasitic Weaverbirds. By Herbert Friedmann. Pp. viii+196+16 plates. (Washington, D.C.: Government Printing Office, 1960.) 1 dollar. [72]

United States Department of the Interior: Geological Survey. Bulletin No. 1043-D: Isopach Mapping by Photogeological Methods as an Aid in the Location of Swales and Channels in the Monument Valley Area, Arizona. By Irving J. Witkind, William R. Hemphill, Charles L. Phillmore and Robert H. Morris. Pp. iv+57-85. Water-Supply Paper 1630: Surface Water Supply of the United States, 1959. Part 6-B: Missouri River Basin below Sioux City, Iowa. Prepared under the direction of J. V. B. Wells. Pp. xi+474. Professional Paper 354-E: Interpretation of the Composition of Lithium Micas. By Margaret D. Foster. Pp. iv+115-147. (Washington, D.C.: Government Printing Office, 1960.) [72]

Memoirs of the Mount Stromlo Observatory. Memoir No. 15 (Final number of Vol. 3): An Absolute Isophotometry of the Southern Milky Way and Two Fields in Orion. By Hugh M. Johnson. Pp. 22+80 charts. (Canberra: Australian National University, 1960.) [72]

Field Museum of Natural History, Chicago. Botanical Series, Vol. 13, Part 5, No. 2: Flora of Peru. By J. Francis Macbride. Pp. ii+539-854. (Publication 902.) (Chicago: Field Museum of Natural History, 1960.) 6 dollars. [72]

Somaland: Ministry of Natural Resources. Mineral Resources Pamphlet No. 3: Minerals and Rocks of Hargeisa and Borama Districts. By J. L. Daniels. Pp. ii+25. (Hargeisa: Ministry of Natural Resources, 1960.) Shs. 4. [82]

Conseil National de la Politique Scientifique. Rapport Annuel, 1960. Pp. 132. (Bruxelles: Conseil National de la Politique Scientifique, 1961.) [82]

Editorial and Publishing Offices of "NATURE"

MACMILLAN & CO., LTD.

ST. MARTIN'S STREET, LONDON, W.C.2

Telephone Number: Whitehall 8831. Telegrams: Phusis Lesquare London

Annual subscription £8/8/-, payable in advance,
postage paid to any part of the world

Advertisements only should be addressed to

T. G. Scott & Son, Ltd., 1 Clement's Inn, London, W.C.2.
Telephone Number: Holborn 4743

All rights reserved. Registered as a newspaper at the General Post Office