

haviour of impulse activity in neural networks, which he described by local differential equations. He became interested in neuronal differentiation and suggested a molecular basis for the differences between classes of nerve cells. He considered that an alteration in the connexions between neurones is the most plausible theory for the neural basis of memory and turned to consider how such alterations could be initiated. In his "two gates" hypothesis he suggested that when two synaptically coupled cells fire together, their membranes become permeable to a chemical messenger substance which passes across the synapse from one cell to the other. He then went on to show how such a substance might act in order to change the functional connexions between the two cells. This was probably his most important contribution to brain theory. It created widespread interest although, because of technical difficulties, it remains to be tested. In 1967 he produced a short monograph entitled *A View of the Brain*, presenting, among other things, some controversial ideas about the establishment of connexions in the visual system, and 1971 saw the publication of his last book, completed during his long final illness, entitled *Mathematical Neurobiology*, in which he outlined the mathematical theory of neuronal networks, of action potentials and of information storage systems in general. It will be some time before the full implications of Griffith's original contributions to this subject are fully worked out.

No account of John Griffith's life would be complete without a reference to his deep passion for mathematical purity, his thoroughly original approach to any problem in which he was interested, and — behind a somewhat reserved exterior — a quiet shy smile that endeared him to his friends.

Announcements

International Meetings

July 2–14, **Padé Approximants and their Applications**, Canterbury (Dr A. K. Common, School of Mathematics, University of Kent, Canterbury, Kent).

July 3–4, **Advances in Applied Spectroscopy**, London (Conference Administrator, IPC Business and Industrial Training Limited, 161–166 Fleet Street, London EC4).

July 3–5, **Band Structure in Solids**, Exeter (Professor E. P. Wohlfarth, Department of Mathematics, Imperial College, London SW7).

July 3–5, **British Society for the History of Science Meeting**, Exeter (Assistant Secretary, British Society for the History

of Science, 47 Belgrave Square, London SW1).

July 3–7, **Models, Evaluations and Information Systems for Planners**, Cambridge (Richard Baxter, Centre for Land Use and Built Form Studies, 16 Brooklands Avenue, Cambridge CB2 2BB).

July 3–7, **Tropical Hygiene**, London (Ross Institute of Tropical Hygiene, London School of Hygiene and Tropical Medicine, Keppel Street (Gower Street), London WC1E 7HT).

July 3–7, **Sex Education**, Tel Aviv (Dr E. Chigier, PO Box 16271, Tel Aviv, Israel).

July 3–7, **Nuclear Magnetic Resonance Spectroscopy**, Guildford (Dr John F. Gibson, The Chemical Society, Burlington House, London W1V 0BN).

July 3–8, **Chemistry in Evolution and Systematics**, Strasbourg (Dr J. B. Harborne, Phytochemical Unit, Botany Department, The University, Reading RG1 5AQ).

July 3–20, **Athens Ekistics Month**, Athens (P. Psomopoulos, Athens Centre of Ekistics, Box 471, Athens, Greece).

July 3–29, **Plasma Physics**, Les Houches (Ecole d'Été de Physique Théorique, 74 Les Houches, Haute Savoie, France).

July 4, **The Measurement of Radiative Lifetimes of Atoms and Simple Molecules**, Oxford (The Meetings Officer, Institute of Physics, 47 Belgrave Square, London SW1X 8QX).

Reports and Publications

not included in the Monthly Books Supplement Great Britain and Ireland

Centre for Overseas Pest Research. *Tropical Pest Bulletin No. 1: Illustrated Descriptions, Distribution Maps and Bibliography of the Species of *Quelea* (Weaver-Birds: Ploceidae)*. By Joyce I. Magor and P. Ward. Pp. 23+2 plates. (London: Centre for Overseas Pest Research, 1972.) £1 net. [223]

Imperial Cancer Research Fund—Annual Report and Accounts for 1971. Pp. 77. (London: Imperial Cancer Research Fund, 1972.) [233]

Harwell Industrial Research. *Radioisotopes in Industry: Instruments and Tracers*. Pp. 12. (London: UKAEA, 11 Charles II Street, 1972.) [233]

Mental Handicap: a Select Annotated Bibliography. Compiled by S. S. Segal. Pp. 52. (Slough, Bucks: National Foundation for Educational Research in England and Wales, 1972.) 40p. [243]

Chemist and Druggist Directory 1972 and Tablet and Capsule Identification Guide. Pp. 332. (London: Benn Brothers, Ltd., 1972.) 66p. [243]

Gardens to Visit 1972. Pp. 64. (Dorking, Surrey: Gardeners' Sunday, White Witches, Claygate Road, 1972.) 10p. [273]

Bellamy on Botany. By David Bellamy. Pp. v + 80. (London: BBC, 1972.) 75p. [273]

The Careers Advisory Board of the Universities of Durham and Newcastle-upon-Tyne. *Twenty-sixth Annual Report*. Pp. 23. (Durham and Newcastle: The Universities, 1972.) [273]

Proceedings of the Royal Irish Academy. Vol. 72, Section A. No. 1: *Some Asymptotic Relations for Starlike Functions*. By F. Holland. Pp. 1–16. 30p. No. 2: *The Idempotent Semigroups of Compact Monothetic Semigroups*. By G. Brown and W. Moran. Pp. 17–34. 32p. No. 3: *The Equations of Motion of Charged Bodies in General Relativity*. By P. A. Hogan. Pp. 35–50. 32p. Vol. 72, Section B. No. 6: *A Preliminary Account of the Simuliidae (Diptera) in Ireland, with Observations on the Growth of Three Species*. By Edward Fahy. Pp. 75–82. 12p. No. 7: *A Correlation of the Ordovician Rocks of Courtown (Co. Wexford) and Tramore (Co. Waterford)*. By W. I. Mitchell, H. Carlisle, N. Hiller and R. Addison. Pp. 83–89. 9p. (Dublin: Royal Irish Academy, 1972.) [273]

University of East Anglia. *Annual Report of the Appointments Board, 1970/1971*. Pp. 44. (Norwich: University of East Anglia, 1972.) [273]

Royal Observatory Bulletins. No. 167: *The Equivalent Widths of Spectral Lines in Twelve Late F. Dwarfs*. By A. L. T. Powell. Pp. 303–314. 29p

net. No. 168: *Spectral Lines for Curve-of-Growth Analysis of Late-Type Stars, I*. By A. L. T. Powell. Pp. 315–350. 50p net. No. 170: *Masses, Radii and Luminosities of RR Lyrae Variable Stars*. By Sir Richard Woolley and Ann Savage. Pp. 363–396. 59p net. (Hurstmonceux: Royal Greenwich Observatory, 1971.) [273]

Philosophical Transactions of the Royal Society of London. B: Biological Sciences. Vol. 263, No. 853 (16 March 1972): *Contributions to the Geology and Palaeontology of Chiloé Island, South Chile*. By W. A. Watters and C. A. Fleming. Pp. 369–408 + plates 26–28. £1.35; \$3.80. Vol. 263, No. 854 (16 March 1972): *The Organization of a Cephalopod Ganglion*. By J. Z. Young. Pp. 409–429 + plates 29–39. £1.40; \$3.90. Vol. 263, No. 855 (16 March 1972): *The Genetics of the Mimetic Butterfly *Papilio polytes* L.* By C. A. Clarke and P. M. Sheppard. Pp. 431–458 + plates 40–42. £1.50; \$3.90. Vol. 26. No. 856 (23 March 1972): *Endemic Goltire in the Gilgit Agency, West Pakistan, with an Appendix on Dermatoglyphics and Taste-Testing*. By J. A. Chapman, I. S. Grant, G. Taylor, Khalida Mahmud, Sardar-Ul-Mulk and M. A. Shahid. Pp. 459–491 + plates 43–46. £1.15; \$3.20. (London: The Royal Society, 1972.) [283]

Annual Report of the Paterson Laboratories for 1971. Pp. 144. (Manchester: Paterson Laboratories, Christie Hospital and Holt Radium Institute, 1972.) [293]

The Trees and Woods of Exmoor. By Roger Miles. (Microstudy B2.) Pp. 64 + 25 photographs. (Dulverton: The Exmoor Press, 1972.) 50p. [293]

Nature Conservancy Research Council. *The Nature Conservancy Research in Scotland—Report for 1968–1970*. Pp. vi+98. (Edinburgh: The Nature Conservancy, Scottish Headquarters, 1970.) 50p net. [293]

Alcohol and Drug Dependence—Treatment and Rehabilitation. Pp. 99. (London: King Edward's Hospital Fund for London, 1972.) [44]

Fabian Research Series No. 300: *Public Enterprise*. By Christopher Foster. Pp. 32. (London: Fabian Society, 1972.) 30p. [44]

Ministry of Agriculture, Fisheries and Food. *Technical Bulletin No. 19: Farm Planning by Computer*. Pp. vi+132. (London: HMSO, 1971.) £1.50. [44]

Philosophical Transactions of the Royal Society of London. A: Mathematical and Physical Sciences. Vol. 272, No. 1220 (3 March 1972): *Modern Equations for Long Waves in Nonlinear Dispersive Systems*. By T. B. Benjamin, J. L. Bona and J. J. Mahony. Pp. 47–78. (London: The Royal Society, 1972.) 85p; \$2.35. [44]

Fabian Tract No. 412: *The Politics of the Environment*. By Jeremy Bray. Pp. 24. 25p. Fabian Research Series No. 301: *From Rhodesia to Zimbabwe*. By Kees Maxey. Pp. 40. 45p. (London: The Fabian Society, 1972.) [54]

Potato Marketing Board. *Sutton Bridge Experimental Station—Annual Report—1971*. Pp. 40. Questions and Answers about Potato Grading and Marketing Groups. Pp. 12. (London: Potato Marketing Board, 1972.) [54]

Family Planning in Britain. Pp. 40. (London: Office of Health Economics, 1972.) 25p. [64]

Albright and Wilson, Ltd. *Annual Report for 1971*. Pp. 40. (London: Albright and Wilson, Ltd., 1972.) [64]

The Cleaning of Premises and Plant in Accordance with The Asbestos Regulations. (Control and Safety Guide No. 9.) Pp. 12. (London: The Asbestos Information Committee, 1972.) [64]

Bulletin of the British Museum (Natural History). Zoology. Vol. 22, No. 6: *Bats from Thailand and Cambodia*. By J. E. Hill and Kittit Thonglongya. Pp. 171–196. 95p. Vol. 22, No. 7: *A Redescription of *Spelaomyia serratipes* (Fage) Comb. Nov. (Mysidacea: Lepidomyzidae) from the Material Collected on Aldabra Atoll, with a Key to the Species of Lepidomyzidae*. By R. W. Ingle. Pp. 197–210. 65p. (London: British Museum (Natural History), 1972.) [64]

Agricultural Research Council. *Weed Research Organization—Fourth Report, 1969–1971*. Pp. iv + 104. (London: Agricultural Research Council, 1972.) [74]

National Institute for Medical Research. *Scientific Report for 1970–71*. Pp. iv+114. (London: Medical Research Council, 1972.) [74]

Chemical Society. *Monographs for Teachers No. 20: Silicon Chemistry and Applications*. By C. A. Pearce. Pp. v+74. (London: The Chemical Society, 1972.) £1. [104]

The British Petroleum Company Limited. *Annual Report and Accounts for 1971*. Pp. 47. (London: The British Petroleum Company Limited, 1972.) [104]

The British Council. *Overseas Students in Britain—Statistical Supplement 1970/71*. Pp. 25. (London: The British Council, 1971.) 10p. [104]

The Zoological Society of London. *Annual Report for 1971*. Pp. 69. (London: The Zoological Society of London, 1972.) [104]

Proceedings of the Royal Irish Academy. Vol. 72, Section A. No. 4: *The Attachment of Radon Daughter Products to Condensation Nuclei*. By J. P. McLaughlin. Pp. 51–70. 36p. No. 5: *The Electronic Spectrum of the Bel Radical*. By P. S. Murty and P. T. Rao. Pp. 71–79 + plates 1 and 2. 25p. Vol. 72, Section B. No. 8: *The Declaration of the Sperrin Mountains and Adjacent Areas in Counties Tyrone, Londonderry and Donegal, Northern Ireland*. By E. A. Colbourn. Pp. 91–147 + plates 4–7. 90p. No. 9: *An Early-Breeding Population of Fieldmouse *Apodemus sylvaticus* (L.) in Limekiln Wood, Atheryn, Co. Galway*. By J. S. Fairley and M. E. Comerton. Pp. 149–163. 18p. (Dublin: Royal Irish Academy, 1972.) [104]