there is a constant replacement of cells, and on the skin where the processes of keratinization affect the DNA of the daughter cells.

Dr Pelc collaborated with many major research workers in autoradiographic metabolic studies on their own research problems. Thus his own interests extended from DNA over much of metabolic cellular biochemistry. By 1957, however, when he moved to the MRC Biophysics Research Unit at King's College, his main concern had again become DNA. He then showed, in a series of elegant studies, that the DNA of a wide variety of cells was not as completely stable as had been thought originally during the first flush of the DNA-gene concept. His work showed that sometimes as much as 50 per cent of the nuclear DNA was being turned over, the proportion of this "metabolic DNA" in any given nucleus apparently varying with the general metabolic activity of the cell.

For the past two years he was a member of the MRC external staff, working in the Division of Cellular Biology of the Kennedy Institute of Rheumatology in London. Here he extended his work on metabolic DNA, and showed that the metabolic DNA of splenic lymphocytes was considerably stimulated as a result of the immune response. He had also shown that metabolic DNA was of considerable significance in the process of ageing, and was currently very interested in the work of his collaborators, Dr M. Stroun and Dr P. Anker (Geneva) which showed that DNA can be passed from cell to cell. Thus it seemed likely to him that the metabolic DNA, which he saw as the expendable copies of the genic DNA, could act as a messenger between cells and so carry active gene messages to cells in which these genes were otherwise repressed.

Stephen Pelc was an outstanding scientist. A physicist by training, he was a cell biologist first and foremost, who used physics and mathematics adroitly in his biological research. Everyone who knew him was impressed by his gentle, genial kindliness, his readiness to help others and his good humoured philosophical approach to science and to life generally. He was an original thinker who designed his experiments decisively. Thus he was a pioneer, and pioneers rarely get the immediate recognition of their innovations. Sufficient time had elapsed from his development of autoradiography and his work on the timing of the nuclear synthesis of DNA for him to have been recognized as the authority on the techniques and on cell kinetics. The full significance of his discovery of the metabolic turnover of a fraction of nuclear DNA may yet take several years.

Second to science, his major interest was music, in which he found relaxation and mental refreshment. He was an accomplished violinist and leader of a string quartet which met regularly. He will be greatly missed by his fellow scientists who relied so heavily on him for his general scientific wisdom as well as for his specialized knowledge.

Announcements

Miscellaneous

The following have been elected **Fellows of the Royal Society: Professor Percival Allen** (University of Reading); **Dr Brigitte Alice Askonas,** (Immunology Division, National Institute for Medical Research, London); **Mr Francis Thomas Bacon** (Fuel Cells Limited of Cambridge); **Dr Alan Baker** (University of Cambridge); **Professor Neil Bartlett** (University of California at Berkeley); **Professor William John Granville Beynon** (University College of Wales, Aberystwyth); **Mr John Gatenby Bolton** (Australian National Radio Astronomy Observatory at Parkes, New South Wales); **Professor David Roxbee Cox** (Imperial College of Science and Technology, University of London); **Professor Leslie Crombie** (University of Nottingham); **Professor Harry Elliot** (Imperial College of Science and Technology, University of London); **Professor Douglas Scott Falconer** (University of Edinburgh); **Professor Geoffrey Alan Gilbert** (University of Birmingham); **Professor Harish-Chandra** (Institute for Advanced Study, Princeton, New Jersey); **Professor Richard John Harrison** (University of Cambridge); **Professor Harold Horace Hopkins** (University of Reading); **Dr Anthony Kelly** (National Physical Laboratory, Teddington, Middlesex); **Dr Egon Hynek Kodicek** (MRC Dunn Nutritional Laboratory, Cambridge); **Professor Jack Lewis** (University of Cambridge); **Dr Mary Frances Lyon** (MRC Radiobiology Unit at Harwell); **Dr Peter Bryan Conrad Matthews** (University of Oxford); **Professor George Francis Mitchell** (Trinity College, University of Dublin); **Dr Helio Gelli Pereira** (Division of Virology at the National Institute for Medical Research, London); **Professor Paul Emanuel Polani** (Paediatric Research, University of London); **Professor John Graham Ramsay** (Imperial College of Science and Technology, University of London); **Mr Lionel Edward Aston Rowson** (ARC Unit of Reproductive Physiology and Biochemistry, Cambridge); **Dr Monkombu Sambasivan Swaminathan** (Indian Council of Agricultural Research, New Delhi); **Dr Jamshed Rustom Tata** (Developmental Biochemistry, National Institute for Medical Research London); **Dr David Warren Turner** (University of Oxford); **Professor William Frank Vinen** (University of Birmingham); **Professor Paul Egerten Weatherley** (University of Aberdeen); **Professor Ronald Whittam** (University of Leicester); **Professor Alec David Young** (Queen Mary College, University of London.

Reports and Publications

not included in the Monthly Books Supplement

Great Britain and Ireland

Wira. Report and Accounts 1972. Pp. 26. (Leeds: Wira, 1973.) [81

Another Kind of Growth: Industrial Society and the Quality of Life. By Dr Alexander King. (Annual Memorial Lecture, 25 October, 1972.) Pp. 22. (London: David Davies Memorial Institute of International Studies, 34 Smith Square, 1973.) 40p. [81

Ordnance Survey. New Forest Tourist Map (Showing New Forest Boundary.) (Southampton: Ordnance Survey, 1972.) 55p. [81

Philosophical Transactions of the Royal Society of London. A: Mathematical and Physical Sciences. Vol. 273, No. 1234: Large Amplitude Waves in Bounded Media. I. Reflexion and Transmission of Large Amplitude Shockless Pulses at an Interface. By H. M. Cekirge and E. Varley. Pp. 261–313. (London Royal Society, 1973.) £1.40 ; $3.90. [81

Department of the Environment. Welsh Office. Building Regulations 1972—General Guidance Note. Pp. v+26. (London: HMSO, 1972.) 40p net. [91

The Natural Rubber Producers' Research Association. *Rubber Development Supplement*, 1972, Part 4: Correlation Between Vulcanizate Modulus and Rheometer Torque Measurements for the ACS1. By G. M. Bristow. Pp. 22. (Welwyn Garden City, Herts: The Natural Rubber Producers' Research Association, 1972.) [101

Insight USA, No. 1, January 1973. Pp. 1–50. (London: United States Information Service, 55 Upper Brook Street, 1973.) [111

Department of the Environment. Scottish Development Department, Welsh Office. New Life for Historic Areas. (Aspects of Conservation: 2.) Pp. 52. (London: HMSO, 1972.) 50p. [121

Murphy Fruit Grower's Book. Pp. 60. £1.25. Murphy Nurseryman's Book. Pp. 62. £1.25. (Wheathampstead, Herts: Murphy Chemical, Ltd., 1972.) [121

Griffin and George, Ltd. Apparatus for New or Expanding Laboratories. Pp. 53. Apparatus and Chemicals for the Nuffield Combined Science Course. Pp. 13. Apparatus and Materials for the Science 5/13 Project. Pp. 13. Apparatus and Chemicals for the Scottish Integrated Science Course. Pp. 25. Griffin Brochure, New Year Edition. Pp. 23. (Wembley: Griffin and George Limited, 1972.) [121

New Technologist: a Development Action Guide for Workers in Science and Technology. Pp. 16. (London: Voluntary Committee on Overseas Aid and Development, International Development Centre, 25 Wilton Road, 1973.) [151

Proceedings of the Royal Irish Academy. Vol. 72, Section A, No. 11: Some Algebras of Operators with Closed Convex Numerical Ranges. By G. De Barra. Pp. 149–154. 12p. Vol. 72, Section A, No. 12: On Long-Range and Short-Range Interactions of the London-Van Der Waals Type. By B. K. P. Scaife and T. Ambrose. Pp. 155–173. 36p. Vol. 72, Section B, No. 20: The Structure of the Dalradian Rocks Between Glengad Head and Moville, Eastern Inishowen, Co. Donegal. By J. C. Roberts. Pp. 347–358+plate 14. 24p. Vol. 72, Section B, No. 21: Some Brown Podzolic Soils in the West and South-West of Ireland. By M. J. Conry, F. De Coninck, J. Bouma, C. Cammaerts and J. J. Diamond. Pp. 359–402+plates 15–17. 80p. Vol. 72, Section B, No. 22: An Appraisal of the McLachlan Perturbation Method to Calculate Spin Densities. By D. A. Morton-Blake. Pp. 403–414. 18p. (Dublin: Royal Irish Academy, 1972.) [151

University of Glasgow. The Hannah Research Institute for Studies Relating to the Production and Utilization of Milk. Report for 1972. Pp. 64+5 plates. (Ayr, Scotland: The Hannah Research Institute, 1973.) [151

Journal of Nonmetals, Vol. 1, No. 1 (1972). Edited by A. C. Damask, G. J. Dienes and R. Smolichowski. Pp. 1–96. Subscription Rates (Per Volume Postpaid). 4 Issues per volume. Libraries: US/Elsewhere, $50 ; £20.85 ; Great Britain £19.60. Individuals (who warrant the journal is for their own use and order direct from the publisher), USA/elsewhere $14.50 ; £6 ; Great Britain £5.50. (London and New York: Gordon and Breach, Science Publishers, 1972.) [151

Ordnance Survey. Professional Papers New Series No. 25: The Overhaul of the 1:2500 County Series Maps. Pp. 30+9 figures. (Southampton: Ordnance Survey, 1972.) £1.75. [151

Marine Biological Station, University of Liverpool, Port Erin, Isle of Man. Annual Report No. 84 for 1971. Pp. 52. (Liverpool: Liverpool University Press, 1972.) [161

Department of Education and Science. Education Survey No. 17: Aspects of Special Education—Schools for Delicate Children, Special Classes in