

the graduate awards, 216 were made in the life sciences, 866 in the physical sciences, including a number in interdisciplinary fields, and 18 awards were made in certain areas of the social sciences. Of the postdoctoral awards, 55 were made in the life sciences, and 104 in the physical sciences, including a number in interdisciplinary fields, and in the field of econometrics.

#### The Genetic Concept of the Origin of Cancer

THE theory that malignant transformation in cells may be considered to be a genetic event was suggested in 1908 by J. A. Murray of the Imperial Cancer Research Fund (London), but experimental evidence had to wait twenty-years until inbred mice were available. In this respect the credit is due to the pioneering work of Dr. L. C. Strong (Buffalo), who was the organizer and chairman of a conference on "The Genetic Concept for the Origin of Cancer", supported by the New York Academy of Science and the National Institutes of Health (Bethesda). The papers presented by 29 contributors at the Conference, which was held in New York, October 1957, have now been published (*Ann. N.Y. Acad. Sci.*, 71; 801-1241; 1958). They are representative of the various aspects of cancer research of the past three decades. The diverse subjects discussed include: the role of genetic and environmental influence in the causation of experimental cancer: the effect of selection on transplanted tumours; the occurrence of tumours in plant and animal interspecific hybrids; the modifying effects of genes on melanotic tumours in the fruit fly *Drosophila*; the nature of carcinogen-induced mutations in *Neurospora*.

J. Schultz (Philadelphia) attempted to show how our knowledge of genetical changes in somatic cells can be related to malignant change. D. B. Amos (Buffalo), on the other hand, gave examples to illustrate how the antigenic patterns of tumours can be used as a tool to study somatic genetics. The relationship between chromosome changes in tissue culture of mammalian cells and those observed in tumour cells was brought to the fore by A. Levan (Lund) and J. J. Bieseke (New York); the possible relevance of certain types of phage mutations to malignant transformation of cells was discussed by S. E. Luria (Urbana). Papers by P. A. Gorer (London) and C. P. Oliver (Austin) deal with the genetics of human cancer, both agreeing that genetically determined predisposition to a particular type of cancer is present in certain families.

#### Royal Institute of Chemistry: Officers

MR. E. LE Q. HERBERT, managing director of Shell Refining Co., Ltd., was recently elected president of the Royal Institute of Chemistry for 1959-61. He took over this office from Dr. D. W. Kent-Jones (president 1955-57), who had been acting president since the death, on December 19, 1958, of Prof. W. Wardlaw (elected president for 1957-59). Dr. C. W. Herd, Prof. Charles Kemball and Mr. Clifford Paine were elected vice-presidents for 1959-61. Prof. Harold Burton was re-elected honorary treasurer for the ensuing year.

#### Iron and Steel Institute: Changes on Council

The following new members were recently elected to the Council of the Iron and Steel Institute: *President*, Mr. W. Barr; *Honorary Treasurer*, Sir Julian Pode; *Vice-Presidents*, Mr. B. Chetwynd Talbot (chairman and managing director, South

Durham Steel and Iron Co., Ltd.), Mr. C. H. T. Williams (managing director, Park Gate Iron and Steel Co., Ltd.); *Ordinary Members of Council*, Major W. R. Brown (chairman, Ashmore, Benson, Pease and Co., Ltd.), Mr. T. R. Craig (director, Colvilles, Ltd.); *Additional Honorary Members of Council*, Dr. N. P. Allen (director, Metallurgy Division, National Physical Laboratory), Mr. A. Jackson (technical adviser on steelmaking, United Steel Companies, Ltd.).

#### Announcements

DR. D. A. LONG, recently on the staff of the Medical Research Council at the National Institute for Medical Research and during 1957-58 visiting professor in microbiology in the School of Medicine at the University of Pittsburg, has been appointed chief medical adviser and head of the Medical Research Department of the Wellcome Foundation, Ltd.

THE Physical Society is holding a conference on "Co-operative Phenomena and Phase Transitions" at King's College, Newcastle upon Tyne, during July 6-7. Further information can be obtained from the Secretary, Physical Society, 1 Lowther Gardens, London, S.W.7.

UNESCO is holding an arid zone symposium at the Instituto Nacional de Investigaciones Agronomicas, Madrid, during September 24-30. Summaries of proposed papers must reach the Department of Natural Sciences, Unesco, Place Fontenoy, Paris VII, by June 1. Further information can be obtained from the above address.

A CONVENTION on "Television Engineering in Science, Industry and Broadcasting", organized by the British Institution of Radio Engineers, will be held in the University of Cambridge during July 1-5. Delegates may reside in the colleges of the University. Further details can be obtained from the Secretary, British Institution of Radio Engineers, 9 Bedford Square, London, W.C.1.

AT the summer conference of the Society for Applied Bacteriology, to be held in London during July 7-9, a symposium will be held on "Lactobacilli". Those interested in attending, or contributing to, this symposium can obtain further details from the honorary secretary, G. Sykes, Boots Pure Drug Co., Ltd., Microbiology Division, Standards Department, Nottingham.

THE fourteenth Annual Electronics Exhibition and Convention of the Northern Division of the Institution of Electronics will be held at the Manchester College of Science and Technology during July 9-15. It will include extensive displays of electronic equipment of interest in all branches of science and industry. Details can be obtained from the Honorary Exhibition Organizer, Mr. W. Birtwistle, 78 Shaw Road, Rochdale, Lancs.

A MATHEMATICAL colloquium is to be held under the auspices of the Edinburgh Mathematical Society in University Hall, St. Andrews, during July 8-18. The principal speakers will be: Prof. H. S. M. Coxeter (subject to be announced), Prof. V. C. A. Ferraro (magnetohydrodynamics), Prof. C. Lanczos (linear operators and function spaces), Dr. A. P. Robertson (functional analysis), and Dr. R. Schlapp (history of mathematics). Further particulars and forms of application can be obtained from Mr. J. R. Gray, St. Salvator's College, St. Andrews.