

active group working in this field. Many important improvements in techniques have been due to this group, particularly the development of methods of measuring relaxation times. Recently, Dr. Powles's main work has concerned spin-rotation interaction in liquids, particularly near the critical point and also relaxation in solids, especially polymers. Dr. Powles's varied experience in teaching and administration and his special interest in border-line fields between physics and chemistry will be particularly valuable in the new University of Kent, where there will be common studies in the initial stages for scientists in several disciplines.

#### Physics at the University of East Anglia :

Prof. D. V. Osborne

DR. D. V. OSBORNE, who has been appointed first professor of physics in the University of East Anglia, leaves the University of St. Andrews, where he has been lecturer in St. Salvator's College since 1954 and senior lecturer since 1960. He was elected Fellow of the Royal Society of Edinburgh in 1958. He entered Trinity College, Cambridge, as a Major Scholar in 1940, and after war service at the Royal Aircraft Establishment, Farnborough, was successively Research Scholar, Coultts-Trotter Student and Research Fellow in Trinity until 1954, taking his Ph.D. in 1950. He has been a Commonwealth Fellow in the Institute for Metals in Chicago and more recently visiting professor in the University of British Columbia. He is best known for his classic experiments on the rotation of superfluid helium and on the measurement of 'second sound' in superfluid helium down to 0.1° K. The observation of a parabolic surface in a rotating bucket of helium II proved that the superfluid did actually rotate and this led to the Feynman concept of quantized vorticity in the superfluid. The 'second sound' measurements were noteworthy on two counts. By themselves they confirmed the Landau prediction of the excitation spectrum in superfluid helium, and technically they were the first experiments in which a large free volume of liquid helium was reduced by magnetic cooling to such a low temperature. Dr. Osborne's recent research work on liquid helium has shown that helium atoms entering the liquid from the vapour interact only with the normal fraction and not with the superfluid, and lately he has startled his botanical colleagues by using mathematical methods to construct taxonomic keys. His vivid imagination and technical skill will be as great a gain to Norwich as they are a loss to St. Andrews.

#### Geophysics at the University of East Anglia :

Prof. D. H. Griffiths

DR. D. H. GRIFFITHS, who has been appointed to the chair of geophysics in the Department of Geology at the University of Birmingham, is a graduate in geology of the University of Manchester, where he took first-class honours in 1948. He went to Birmingham for graduate training, and obtained his Ph.D. In 1950 he was appointed lecturer in the Department of Geology at Birmingham, with special responsibility for the development of geophysics, and under him a vigorous and growing school of teaching and research grew up, closely linked with geological research and teaching. The graduate course in applied geophysics, which was started in 1955, attracted entries from more than twelve countries and its students have spread themselves widely into mineral prospecting and the mineral industries throughout the world. Dr. Griffiths has gained a reputation in research into the magnetic properties of old sediments and in the investigation of the nature of the floor of the Irish Sea. For the past few years he has led a research project on the nature of the floor of the South Atlantic in the region of Graham Land and the Scotia Arc, utilizing magnetic gravitation and seismic methods of investigation; he has paid two visits to the Antarctic for this purpose.

#### Zoology at the University of Manchester :

Prof. A. J. Cain

DR. A. J. CAIN, university lecturer in Animal Taxonomy in the University of Oxford, has been appointed to a chair of zoology from a date to be arranged. Dr. Cain was educated at Lawrence Sherriff School, Rugby, and in 1939 entered Magdalen College in the University of Oxford with an Open Scholarship. In 1941 he obtained honours in the Final Honours School of Zoology, following which he served for four years in H.M. Forces. In 1945 he returned to the University of Oxford as an advanced student in the Department of Zoology, becoming Departmental demonstrator in 1946 and University demonstrator in animal taxonomy (now styled University lecturer) in 1949. He obtained the degrees of M.A. (Oxford) in 1947 and D.Phil. (Oxford) in 1949. In addition to his University lectureship in 1954 he was appointed curator of the zoological collections in the University Museum and was a lecturer in zoology in St. Peter's Hall from 1958 until 1961. Dr. Cain spent a period of six months during 1950 as research worker in evolution and systematics with Dr. E. Mayr at the American Museum of Natural History, New York, and was leader of the University of Oxford Expeditions to the British Solomon Islands (March-September 1953) and to British Guiana (June-December 1959). He is a founder-member of the Society for the Study of Human Biology, president of the Oxford Genetical Society, the University of Oxford representative on the Inter-Universities Committee for Research at Lake Kariba and the scientific secretary in the United Kingdom to that Committee. In 1962 he was awarded the Scientific Medal of the Zoological Society of London, having been for some years zoological secretary of the Systematics Association.

#### Immigrants, Emigrants and Britain's Scientific Manpower

IN reply to a question in the House of Lords on February 20, the Parliamentary Secretary to the Minister for Science, the Earl of Bessborough, said that 878 scientists from Commonwealth countries were at present working in British universities as postgraduate students, and 114 other such scientists were employed by the Atomic Energy Authority, the National Institute for Research in Nuclear Science, the Department of Scientific and Industrial Research, the Medical Research Council and the Agricultural Research Council. Overall figures were not available for the number of British scientists who had returned from the United States, but the number who had returned from the United States as a result of the work of the Joint Interviewing Board was: 1959, 8; 1960, 20; 1961, 39; 1962, 53; and 1963, 26. Many professors and senior university staff were of Commonwealth origin and some 10 per cent of the Fellows of the Royal Society came from overseas. Over the past five years some 1,000 scientists had emigrated to the United States, but in January 1962 there were 123,000 scientists working in Britain. In a written answer in the House of Commons on February 17, the Minister for Science, Mr. Q. Hogg, stated that thirteen scientists employed by the agencies for which he was responsible were recorded as having left Britain during the past six months to take up posts in the United States. On February 18, Mr. Hogg gave the number of scientists and professional engineers who were previously employed by the Atomic Energy Authority and known to have taken up positions in the United States as: 1960, 9; 1961, 8; 1962, 13; 1963, 10. For technicians, the corresponding figures are: 1, 0, 3 and 5. On February 19 he gave the estimated total expenditure on civil research and development in the United Kingdom as: 1955-56, £122 million; 1958-59, £243 million; 1961-62, £388 million, respectively. These figures represent 0.7 per cent, 1.2 per cent and 1.7 per cent, respectively, of the gross national product.