istic circulation of the northern and southern hemispheres depends upon the existence of the ice sheets of Greenland and Antarctica, acting as downshafts for the restoration of air to lower latitudes. Again, in 1927 and in 1928, he led parties to southwest Greenland, and later published a general account of their achievements in "Exploring about the North Pole of the Winds" (New York, 1930). During the Second World War it was Hobbs who suggested Søndre Strømfjord, where his expeditions had worked, as a site for the United States air base which came to be known as Bluie West Eight.

After his retirement Hobbs turned his attention to the historical aspects of polar exploration. As might be expected, he had entered whole-heartedly into the bitter controversy between Frederick A. Cook and Robery E. Peary, and wrote a biography entitled "Peary" (New York, 1936) in vehement support of the American admiral's attainment of the North Pole. Hobbs also devoted much attention to the discovery of the antarctic continent, and published the results of his investigations in 1937. In exceptionally harsh and acrid terms he sought to show that it was an American sealer, Nathaniel Brown Palmer, who first sighted Antarctica, although there is no doubt whatever that Edward Bransfield was, in fact, the first to do so. Hobbs's attempt to discredit men like Bransfield and James Weddell, and his ruthless misrepresentation of original documents, was a source of great embarrassment to his many friends in Britain.

Whatever doubt there may be as to the worth of Hobbs's contribution in some fields, of his vigour and enthusiasm there can be no question. He was never afraid to state his views, however controversial; but it is regrettable that he was so rarely prepared to admit, in the face of overwhelming evidence, that he had been mistaken. J. D. M. BLYTH

Prof. David Katz

THE death of Prof. David Katz on February 2 at the age of sixty-nine removes from psychology a gifted and versatile experimentalist of the first rank. Born in Cassel, Hessen-Nassau, in 1884, he studied natural science and mathematics at Göttingen and later turned to psychology, under the direction of G. E. Müller. It was characteristic of him that his interest in psychology was aroused by acting as a subject in an experiment. He pursued these early studies at Munich and Berlin, and it was during this time that he came under Husserl's influence, which remained throughout his life. On receiving his doctorate in 1906, he spent some months in military service and then proceeded to Munich, where Theodore Lipps was a focus of interest, and afterwards to Würzburg, where Kulpe's laboratory was the main attraction.

He took up his first appointment at Göttingen in 1907 as G. E. Müller's assistant, and remained there until the outbreak of the First World War, when he enlisted and served for nearly four years. In 1918 he had the opportunity of working for some time at the Engineering School in Hanover, being engaged in the study of sensory-motor reactions of Sauerbruch amputees, thus introducing psychological methods into the field of prosthesis.

In 1919 he married Rosa Heine, a psychologist in her own right, who has always been closely associated with her husband's work, particularly on child and animal behaviour. In the same year Katz accepted the new chair of psychology and education at the University of Rostock. He stayed there until 1933 when he was forced to leave because of the Nazi regime. Fortunately, an invitation was extended to him to work in Prof. T. H. Pear's laboratory in the University of Manchester and later in Sir Cyril Burt's Department at University College, London. While in England he also carried out experiments on monkeys at the London Zoo and for two years acted as psychological adviser to the British Research Association of Flour Millers. In 1937, he was appointed to the first chair of pedagogy and psychology in the University of Stockholm, where he remained until his retirement in 1951.

The wide scope of Katz's experimental interests is indicated by his original work on sense perception (especially colour-vision, touch, taste and vibration), child development, processes of thought and learning, and animal behaviour. He preserved until the end an originality and freshness of approach in all his varied work, and his writings are characterized by simplicity, directness and lucidity.

During 1930-33 he was co-editor of the Zeitschrift für Psychologie. In 1950, he went to the University of California to deliver the Hitchcock Lectures, and in 1951 he was president of the Thirteenth International Congress of Psychologie und Mathematische Unterricht", "Studien zur Kinderpsychologie", "The World of Colour", "The World of Touch", "Hunger and Appetite", "Conversations with Children" (jointly with Rosa Katz), "A Psychological Atlas", "Gestalt Psychology", and "Animals and Men".

Prof. Katz possessed great charm of personality and a sense of humour, and his unfailing kindness won him numerous friends in many countries. He leaves a widow and two sons. JOHN COHEN

Dr. Edward Hope

DR. EDWARD HOPE, who died at Caterham on February 7, was born on December 19, 1886, and received his chemical training under W. H. Perkin, jun., at the University of Manchester. His earliest researches included studies in the preparation and reactions of several interesting alicyclic and aliphatic acids, as well as some notable investigations, conducted in collaboration with Sir Robert Robinson, in the narcotine and gnoscopine group of alkaloids.

Perkin had moved to Oxford in 1913, and, during the First World War, British Dyes, Ltd., organized a team of chemists to investigate, under his direction, difficulties which had arisen in the manufacture of dyes and their intermediates. Hope went to Oxford in 1916 to join this team and worked in the newly opened Dyson Perrins Laboratory. In 1919 he accepted an appointment as lecturer and demonstrator in the new laboratory, and at the same time became a Follow and tutor in chemistry at Magdalen College.

The immediate post-war period was one of considerable reorganization and development in the chemistry school at Oxford. The research year had just been introduced as an integral part of the honours course, and Hope applied himself wholeheartedly to the problems of the laboratory and the needs of a largo body of pupils at Magdalen. He maintained his interest in research and published a number of papers jointly with his students, mostly on the chemistry of substances related to the indigo dyes; but he was carrying a heavy burden of work and showed early signs of the ill-health which marked his later years. Although he found it necessary to relinquish his teaching duties at Magdalen in 1933, he remained at the College, where he filled various offices and ultimately became Senior Fellow. He continued his work at the Dyson Perrins Laboratory as a University demonstrator and lecturer until he reached the normal age of retirement in September of last year. For many years he edited the "Chemists' Year Book".

Hope will long be remembered with affection by his pupils and colleagues. He was a popular and successful tutor, and countless numbers of Oxford chemists will recall with gratitude the friendly advice and encouragement which they received from him in the laboratory. S. G. P. PLANT

NEWS and VIEWS

Organic Chemistry in the University of Leeds : Prof. F. Challenger

PROF. F. CHALLENGER, who retires from the chair of organic chemistry in the University of Leeds at the end of the present session, studied under Jamieson Walker, Kipping and Wallach, and held appointments in the Universities of Birmingham and Manchester before succeeding Ingold at Leeds in 1930 (see Nature, 126, 187; 1930). He has seen the department move from its old outgrown quarters to the present large building, opened in 1933, and has seen that in turn strained to the utmost to contain the greatly increased numbers of post-war students. However, university expansion with its concomitant administrative problems has not kept Challenger away from the laboratory bench, nor has he shared the post-war doubts of some about the aims of a university; whether in the Senate, in the chair at the Ph.D. Committee, or in discussion with individual students, his influence has always been emphatically on the side of the pursuit of new knowledge. Challenger's friendly and generous disposition has not only established good relations between the Chemistry Department in Leeds and those elsewhere (particularly the Dutch schools of organic chemistry), but has also shown itself in the way he has helped a succession of postgraduate students who have worked with him, and in his unfailing courtesy and kindness to his colleagues.

Challenger's researches have been concerned principally with biological methylation and with the synthesis, structure and properties of heterocyclic sulphur compounds, particularly the thiophthens, the solid isomer of which he was the first to isolate. His studies of the methylating properties of moulds have revealed many interesting reactions, such as the fission and methylation of organic disulphides, the production of alkyl mercaptans from methionine and alkyl cysteines, as well as the methylation of inorganic and organic compounds of arsenic, selenium and tellurium. The last-named reaction is analogous to that which takes place in animals. His views on the similarity of the transmethylation mechanism in moulds and in animals have recently been confirmed by his own elegant experiments with compounds labelled with carbon-14. With Dr. Simpson he showed that the dimethyl sulphide evolved by alga Polysiphonia fastigiata the marine red arises from the decomposition of the thetine

 $(CH_3)_2$ S.CH₂.CH₂ COO⁻; this compound, the first of its class to be found in plants, was shown later by du Vigneaud and by Dubnoff to act as a methyl donor in the conversion of homocysteine to methionine in rats, and a valuable link was thus forged between the parallel investigations in Leeds and Cornell. He has also demonstrated the presence of dimethyl sulphide (shown by Haas to occur in *Polysiphonia*) in numerous other plants.

Dr. B. Lythgoe

DR. B. LYTHGOE, who succeeds Prof. Challenger, is a Lancashire man. He was educated at Leigh Grammar School and the University of Manchester, where he graduated in 1934, and commenced postgraduate work in organic chemistry under the leadership of Sir Ian Heilbron. In this early phase of his career he was introduced to the chemistry of natural products and made important contributions to the study of algal carotenoids, including the isolation of myxoxanthin, the characteristic pigment of the Myxophyceæ. After a brief spell in industry, Dr. Lythgoe joined the staff of the Chemistry Department at Manchester in 1938, and there he began an association with Prof. A. R. Todd which, starting with some vitamin studies on the liver filtrate factor (pantothenic acid), developed into a co-operative attack on the problem of nucleoside structure. In a series of well-known investigations, spread over a number of years, the structure of the natural ribonucleosides was completely elucidated and their synthesis effected. It was during the development of this field that Dr. Lythgoe moved in 1944 with Prof. Todd to Cambridge, where he is at present lecturer in chemistry and a Fellow of King's College.

Parallel with the development of the work on nucleosides in Cambridge, Dr. Lythgoe's wide ranging interest in natural products caused him to initiate a series of brilliant researches on some unusual natural toxic principles, including the remarkable substance macrozamin, obtained from members of the Cycadaceæ, which he showed to be a derivative of azoxymethane, and the acetylenic substances responsible for the toxic effects of the British plants Oenanthe crocata and Cicuta virosa. These investigations and his other related studies have attracted much attention, both for their elegance in experimentation and for the theoretical insight which they display. Indeed Lythgoe's unusual combination of theoretical and natural product interests, coupled with his strong personality, assure a vigorous future for organic chemistry in Leeds.

Royal Society of Edinburgh: New Fellows

AT the sixth ordinary meeting of the Royal Society of Edinburgh held in the Society's Rooms, 24 George Street, Edinburgh 2, on March 2, the following were elected Fellows of the Royal Society of Edinburgh: Prof. F. Bell, Department of Chemistry, Heriot-Watt College, Edinburgh; Mr. L. J. F. Brimble, joint-editor of Nature; Prof. J. L. Burchnall, Department of Pure Mathematics, University of Durham; Dr. E. A. C. Chamberlain, divisional chief scientist, Scottish Division, National