

entered University College, Reading, where he was to live and work for almost the rest of his life. W. L. de Burgh, the professor of philosophy, gave him such scope as was available to introduce psychology, and the good judgment with which Wolters handled this admirable but hazardous opportunity ensured a much earlier start for an independent department and honours school at Reading than was possible in many other places. His quiet advocacy, too, prevailed among manifold claims and restricted resources and somehow saw to it that a specially designed laboratory was built. Here, in the years which followed the War, he built up a school of psychology modest in size, but the quality of which aroused the envy and admiration of his colleagues elsewhere. At the same time his self-effacing talents were devoted to his University—he became deputy vice-chancellor in 1947—then preparing for complete removal to Whiteknight's Park, and beset by the difficulties of post-War expansion. His moderation and his constructiveness in meeting these problems were indispensable.

Wolters's modesty and simplicity were inherent and free of contrivance, his perceptiveness unforced. His qualities stirred young people much, but himself only a little, to intellectual achievement. His main explicit contribution to psychology—an extension of Head's concept of *Schema* into the field of conceptual thinking—is an original contribution the full implications of which probably remain to be appreciated. But the inspiration of his teaching and the gentleness with which he deflated the pretentious will long be remembered and admired.

R. C. OLDFIELD

Prof. A. F. Kapustinsky

ANATOLY FEDOROVICH KAPUSTINSKY was born in Zhitomir on December 19, 1906, and died in Moscow on August 26, 1960. He studied chemistry in the University of Moscow, from which he graduated in 1929. His main field of research was in physical chemistry and thermodynamics. He was particularly interested in work on the energetics of chemical reactions, in the energy of the crystal lattice, in crystallochemistry and its application to geology. In

1933 he proposed the second principle of crystallochemistry, namely, that the energy of the crystal with its attendant properties is determined by the number of ions, their radii, their valencies, and their degree of polarization. At the same time he proposed a simplified equation for the energy of the crystal lattice in ionic crystals, and in 1943 he produced a revised equation, which enabled him to calculate the energy of the crystal lattice of compounds with complex ions. Still later, he produced a number of equations applicable to various crystallochemical problems.

Besides these problems, Kapustinsky tried to solve many others, especially in thermodynamics. In collaboration with B. A. Shmelev, he devised a new method of physico-chemical analysis which enabled them to study complex equilibrium systems. He also published numerous papers dealing with thermochemical methods, with ionic compounds, electrolytes and chemical technology. By introducing the zero period into the Periodic Table he developed the idea of secondary periodicity which he linked with the periodic structure of atomic nuclei. This led him to discuss matter subjected to high pressure and then to apply these ideas to his new "Theory of the Earth" (see *Nature*, 180, 1245; 1957).

During his busy life, Kapustinsky occupied the following posts: professor of physical chemistry at the University of Gorky (1933–37); the same post at the Moscow Steel Institute (1937–41) and also at the University of Kazan (1941–43); professor of general and inorganic chemistry at the Chemical-Technological Institute in Moscow (1943–60). In 1939 he was elected corresponding member of the Academy of Sciences of the U.S.S.R.

Kapustinsky's publications are varied and numerous. Besides pure research, he published some thirty papers dealing with topics related to the history of chemistry. He also edited many books translated into Russian.

In private life Kapustinsky was a most jovial fellow and a very versatile conversationalist, and his death at the early age of fifty-four was deeply felt by his friends, of whom he had many.

S. I. TOMKEIEFF

NEWS and VIEWS

Applied Mathematics at Manchester :

Dr. F. Ursell

THE Beyer professorship of applied mathematics at the University of Manchester is to be filled by Dr. F. Ursell from October 1, following the departure of Prof. M. J. Lighthill for the Royal Aircraft Establishment in 1959. Dr. Ursell is at present a lecturer in the Department of Applied Mathematics and Theoretical Physics, University of Cambridge. He took the Mathematics Tripos at Cambridge during the early years of the War (in company with his predecessor in the Beyer professorship), and spent the remainder of the War at the Admiralty Research Laboratory, Teddington. The introduction which he gained there to problems associated with water waves evidently made a deep impression, for he has pursued such problems steadily and successfully since that time, and has done much to revive interest in a 'classical' subject which—like so many others—was thought to be well understood and well tilled

until war needs revealed deficiencies. In 1947, he was elected to a research fellowship at Trinity College, Cambridge, for a dissertation embodying his research on water waves. A short time later, he proceeded to the University of Manchester, where he held an I.C.I. Fellowship, returning to Cambridge to take up a lectureship in 1951. He was eventually elected to a research fellowship at King's College, and has received other tributes to his research, which is characterized by great analytical power. He is interested in a wide variety of mathematical techniques, and can be expected to maintain the high reputation of Manchester as a centre of teaching in applied mathematics.

Electrical Engineering at Birmingham :

Prof. J. T. Allanson

MR. J. T. ALLANSON has been appointed to the recently established second chair in the Electrical Engineering Department in the University of Birm-