the lens designs for a one-million-volt electron microscope which might have given a resolving power of 1-2 Å and worked out the theories of quadruple and octuple systems for correcting spherical aberration; he set up an experimental electron-optical bench for the measurement and correction of spherical aberration and devised computer programmes to solve related problems. His great mathematical ability coupled with a keen physical insight kept his work in the forefront of what was required by

## NEWS and VIEWS

#### The Royal Society Awards: Royal Medals

H.M. THE QUEEN has approved recommendations made by the Council of the Royal Society for the award of the two Royal Medals for 1963 as follows: to Prof. H. H. Read, emeritus professor of geology in the University of London and Senior Research Fellow in geology, Imperial College of Science and Technology, London, for his outstanding contributions to the understanding of the processes of rock metamorphism and the origins of granite; to Dr. Robert Hill, member of the staff of the Agricultural Research Council, for his distinguished work in the biochemistry of plants, especially for his contributions to knowledge of photosynthesis.

### Mathematics in the University of Warwick :

Dr. E. C. Zeeman

DR. E. C. ZEEMAN, whose appointment to the chair of mathematics in the new University of Warwick has recently been announced, has, since the War, been one of the leaders of the school of topology in Cambridge, where he is a University lecturer in mathematics and a Fellow of Gonville and Caius College. His work has been mainly in the geometrical theory of manifolds and he has taken a leading part in the recent revival of purely combinatorial methods in this subject. He had a large share in the work which led to the proof two years ago of the Poincaré hypothesis for spaces of dimension 5 and upward, a famous conjecture which had been outstanding for many years in spite of many attempts on it. He has also recently put forward an interesting theory of the functioning of the brain, and especially of the processes of vision, based on concepts taken from those of general topology. Dr. Zeeman's loss is bound to be keenly felt in Cambridge, where he is the centre of an active research group. He will have the good wishes of all for his success in building a new school at Warwick.

### Inorganic Chemistry at Monash University :

Prof. B. O. West

DR. B. O. WEST has been appointed to the newly established chair of inorganic chemistry at Monash University. Dr. West, who was born in 1928, was educated at Adelaide Boys High School and the University of Adelaide. After graduating with honours in physical and inorganic chemistry in 1949, he joined the staff of the Chemistry Department of the University of Adelaide, where he held the positions of demonstrator, lecturer and senior lecturer and was, in 1962, appointed reader in inorganic chemistry. During this period, in 1953-54, he spent two years at the University of Cambridge, where he held a Rhondda research studentship at Gonville and Caius College, and worked in the inorganic chemistry research laboratories. Dr. West's main research interest has been in the chemistry of co-ordination compounds and he has made significant contributions to our knowledge of the preparation and reactions of the inner complexes. More recently, he has also become interested in the chemistry of organometallic compounds and has developed new methods for the synthesis of compounds

the industry, and he keenly wanted to join the engineering team responsible for instruments based on electron optics.

He was of a quiet disposition, and thought deeply before he spoke; his pronouncements were always appreciated by his colleagues and staff. In earlier life he had composed music which had been played in public, and he was a good tennis player.

He leaves a widow and one son.

T. E. Allibone

# containing both fluoroalkyl and alkyl or aryl groupings attached to the same element.

# Bio-Engineering at the Royal College of Science and Technology, Glasgow

THE Council of the Royal College of Science and Technology has announced the formation of a Bio-Engineering Unit within the Department of Mechanical Engineering; Dr. R. M. Kenedi has been appointed research professor, as from October 1, 1963. Work in this field first commenced in the Department of Mechanical Engineering in the College some six years ago with experimental studies of skin tension in the human body and with the application of refrigeration techniques in hypothermia. Since then, the Department's research activity in this field has greatly intensified in close co-operation with Glasgow's teaching hospitals. Co-operation takes the form of direct collaboration between surgeons, physicians and engineers, working as combined teams in the College engineering laboratories, the hospital wards and operating theatres and the various medical research departments as required. Thus the medical side is allowed every opportunity to become familiar with the available relevant engineering techniques, while the engineers are taken directly into the hospitals to become fully acquainted with particular medical problems under consideration in relation to the human patient. The Unit will be administered by the Department of Mechanical Engineering in the College in association with a Steering Committee. The primary duty of the Steering Committee will be to screen the projects put forward for investigation and to authorize work on such as seem suitable and practicable.

### Dr. R. M. Kenedi

DR. R. M. KENEDI graduated B.Sc. with honours in civil engineering at the University of Glasgow in 1941. and was awarded the degree of Ph.D. (Glasgow) in 1947. He was awarded the honorary degree of C.H. of the National University of Engineering, Lima, Peru, in 1958, and is an Associate Member of the Institution of Mechanical Engineers and an Associate Fellow of the Royal Aeronautical Society. He joined the staff of the College in the Department of Civil and Mechanical Engineering in 1941 and was appointed to a senior lectureship in 1947. He became reader in strength of materials in 1956, a post which he has held until his present appointment. In addition to his academic duties, Dr. Kenedi has pursued a wide range of research interests, many connected with industrial problems. In 1957 he carried out a two-month tour of universities and industrial research centres in the United States, surveying current research on cold-forming processos and products for the Cold Rolled Sections Association, and in 1958, as a result of a joint invitation from the Universidad Nacional de Ingenieria, Lima, and the British Council, he spent some six weeks in Peru, lecturing and advising on the contents of engineering courses and on the planning of a materials testing laboratory. Dr. Kenedi was born in Hungary and became a naturalized British subject in 1947.