

active participant at many international conferences and symposia, the most recent being the U.N.C.S.A.T. Conference in Geneva in 1963. In 1960 he was appointed assistant director of the Electrical Research Association, and in this capacity his broad outlook, his range of engin-

ering knowledge and his concern for the well-being of his colleagues were of great value.

He was a generous, likeable man whose passing will leave the poorer all with whom he ever came into contact.

A. H. STODHART

## NEWS and VIEWS

### Physics in the University of Sussex : Dr. D. F. Brewer

DR. D. F. BREWER has been appointed to a chair in physics in the University of Sussex. He was born in 1925, and went to the University of Oxford during the Second World War to take a shortened course in physics. He then spent three years of research in industry before returning to Oxford where he took an honours degree in 1950. For his doctoral thesis with Mendelssohn at the Clarendon Laboratory, Brewer selected work on the properties of liquid helium, a subject to which he has since devoted most of his efforts and to which he has made a great number of important contributions. He became particularly interested in the formation of the helium film from the gas phase and found that the onset of superfluidity is suppressed as the film thickness is reduced. Dr. Brewer further investigated the destruction of superfluidity by vortex formation in channels of varying diameter—research which also led to a new determination of the viscosity of the normal component. All this work was done in Oxford, some in collaboration with D. O. Edwards. He left in 1957 for Columbus, Ohio, where another of Mendelssohn's old students, J. G. Daunt, had been carrying out experiments on the properties of liquid helium-3. There Dr. Brewer was responsible in part for the discovery of the melting curve minimum and in the work on the specific heat below 1° K. He returned for three years to Oxford in 1959 where he determined the specific heat of helium-3 under pressure down to 45 millidegrees. When in 1962 the University of Sussex decided to enter the field of low temperature research, Dr. Brewer was an obvious candidate to lead it. He joined first as senior lecturer, and was appointed reader in 1964. Again the properties of adsorbed helium, now of both isotopes, became his main interest, but various other problems are being investigated in his group, which already numbers ten.

### Microbiology in the University of Sheffield:

Dr. J. R. Quayle

DR. J. R. QUAYLE, senior lecturer in the Department of Biochemistry since 1963, has been appointed to the West Riding chair of microbiology in the University of Sheffield in succession to Prof. S. R. Elsdon, who has been appointed the first director of the Agricultural Research Council's new Food Research Institute at Norwich (*Nature*, 204, 1036; 1964). Dr. Quayle graduated in chemistry at the University of Wales and later obtained a Ph.D. at the same University. On moving to Cambridge—where he obtained a second Ph.D. under the supervision of Lord Todd—his interests began to move in the direction of biology. It was, however, when Dr. Quayle went to California to work with Prof. Melvin Calvin that his transformation to a biologist came about. In Prof. Calvin's laboratory, where he made key contributions to the understanding of the enzymology of photosynthetic carbon dioxide fixation, he made his first contact with micro-organisms and with the technique of autoradiography. In his subsequent career as a microbiologist, carbon dioxide fixation mechanisms have been one of his main interests, and his use of autoradiography to elucidate metabolic pathways of micro-organisms has been a characteristic feature of his research. On returning to the United Kingdom, Dr. Quayle joined Sir Hans Krebs as a

member of the Medical Research Council's Unit for Research in Cell Metabolism in Oxford. Here he had a particularly fruitful association with Prof. H. L. Kornberg and built up an international reputation for himself in working out the metabolic pathways whereby micro-organisms elaborate complex substances commencing with substances as simple as formate or acetate as sole source of carbon. The combination of chemical expertise with a feeling for, and understanding of, living things is rare, but where it exists, as shown by Dr. Quayle's career and numerous publications, it can produce an outstanding microbiologist.

### Solid-State Physics in the Bradford Institute of Technology:

Dr. D. Bijl

DR. D. BIJL, reader in natural philosophy at the University of St. Andrews since 1959, has been appointed professor of solid-state physics in the Bradford Institute of Technology. Dr. Bijl was awarded the degrees of 'candidatus' and 'doctorandus' from the University of Leiden. After the Second World War he re-started his experimental work on paramagnetic relaxation. For the latter, together with research on electron spin resonance partly carried out in Oxford during the tenure of a British Council scholarship, he was awarded a Dr.Sc. (Physics) by the University of Leiden. From 1950 until 1955 Dr. Bijl held a Pressed Steel, Ltd., Company research fellowship at Oxford. During this time he pursued two lines of research: thermal expansion of solids at low temperatures and electron spin resonance in crystals at low temperatures. His research group at the University of St. Andrews has developed work in these fields. The future main lines of research which Dr. Bijl expects to develop are in microwave spectroscopy, lattice dynamical properties of solids and semiconductor physics. For the session 1965-66 Dr. Bijl has accepted an invitation to spend a year at Massachusetts Institute of Technology as visiting professor in the Centre for Materials Research and Engineering. When he takes up his appointment at Bradford, Dr. Bijl will be responsible for the development of research and postgraduate studies in solid-state physics and for assisting in the staffing and organization of undergraduate schools.

### Medical Research Council : Advisory Boards

THE Medical Research Council is assisted in the formulation and execution of its research programme by three Advisory Boards, the Clinical Research Board, the Biological Research Board and the Tropical Medicine Research Board. These bodies have the main function of overseeing the progress of work supported by the Council and advising on proposals for such support in their respective fields, and their membership is closely integrated with that of the Council itself. Members of the Clinical Research Board and the Tropical Medicine Research Board are appointed in consultation with the Health Departments and the Ministry of Overseas Development respectively. The following appointments by the Council to the three Boards from October 1 are announced: *Clinical Research Board*, Prof. A. S. Duncan, Department of Obstetrics and Gynaecology, Welsh National School of Medicine, Cardiff, and Prof. T. Cecil Gray, Department of