

expected from a tutor of research students. Nevertheless, many of the subjects in which he was interested he worked on and published on his own. Examples of this were the decomposition of naphthalene in soil by micro-organisms, sterilization by ultrasonics, nitrogen-fixing bacteria in the soil and microbial control of the flower moth *Ephestia kuehniella* Z. However, his main investigational work concerned studies in the dynamics of disinfection. His main collaborator in this work was Dr. R. C. Jordan, from the Physiology Department of the University College of South Wales and Monmouthshire. These two, with an occasional other collaborator, wrote a classical series of papers in the *Journal of Hygiene* between 1944 and 1947. In a series of fourteen papers, these investigators made a fundamental study in this field, using *Escherichia coli* and phenol. They studied the effect on rate of reaction of disinfection of concentration and temperature, pH, food supply, etc., and from the experimental data resulting were able to attack those investigators who held that death of micro-organisms by disinfection followed an exponential curve. These workers showed quite clearly, with the system set up, that disinfection curves were basically sigmoid in nature but that when the rate of disinfection was rapid, these sigmoid tendencies could not be observed; furthermore, by altering the conditions of the system, the shape of the curve could be varied so that if portions of the curve only were examined, it would appear that the death of micro-organisms in contact with the disinfectant followed a straight line on a semi-logarithmic plot. For this work, both he and Dr. Jordan were awarded the degree of D.Sc. in the University of London in 1948.

In 1960 Dr. Jacobs addressed the British Pharmaceutical Society at a symposium on "Chemical Disinfection", summarizing these theories and bringing forward new information concerning the simultaneous death and multiplication of micro-organisms in low concentration of disinfectant. So recently as 1961 he published his research on the viability of bacteria damaged by phenols, and there is little doubt that his fertile mind had planned further similar investigations for the future.

Stanley Jacobs used to love to roam the countryside of Europe in his car with his wife, Joyce, but undoubtedly his greatest hobby was editing the *Journal of Applied Bacteriology*. This occupied most of his leisure hours. He was a perfectionist here, as elsewhere, as most of the contributors to the *Journal* knew. This was, however, not merely slavishness to a certain style or format but a striving for correctness of expression and scientific detail. Furthermore, he was not a harsh editor, but one who would go to endless trouble to make suggestions to authors by way of pencilled notes on the typescript or even complete re-writing of whole sections to show them how their material could best be presented. For this he endeared himself to many a young research worker or one whose mother tongue was not English, and also brought about a chastening reaction to well-known and experienced writers. I myself had the honour to be associated with Stanley Jacobs as co-editor of the *Journal* during its formative years when it emerged as a fully fledged journal of international repute.

Stanley Jacobs was married in 1931 and is survived by his wife, Joyce, and their son, Barry, who has in some measure followed in his father's footsteps in that he obtained an honours degree in mechanical engineering in the City and Guilds College of the Imperial College of Science and Technology and is now a lecturer in that College.

L. F. L. CLEGG

NEWS and VIEWS

Scientific Attaché in British Embassies at Bonn and Vienna

Mr. R. Ashton

MR. RONALD ASHTON has been appointed scientific attaché to the British Embassies in Bonn and Vienna with residence at Bonn, and will take up his post in the autumn. He succeeds Brigadier C. F. C. Spedding, who is retiring on completion of his term of appointment. Mr. Ashton, who is fifty-one, is at present head of the Overseas Liaison Group of the Department of Scientific and Industrial Research. As scientific attaché, Mr. Ashton will advise the British Ambassadors on scientific matters, promote scientific contacts and report on scientific and technological development in the civil field in the territories to which he is accredited. He will continue to hold his present rank of Senior Principal Scientific Officer. Mr. Ashton read mathematics, physics and chemistry at King's College, London, for a year before going to the University of Oxford with a Meyricke Exhibition. After graduating with first-class honours he did research in organic chemistry at Oxford, and then joined the research staff of Imperial Chemical Industries, Ltd.

Electronics Group, Royal Radar Establishment:

Dr. G. L. Hutchinson

DR. G. L. HUTCHINSON has been promoted deputy chief scientific officer and has taken up a new appointment—head of the Electronics Group of the Physics and Electronics Department at the Royal Radar Establishment. After gaining honours in physics and his Ph.D. at King's College, London, Dr. Hutchinson was awarded a Keddey Fletcher War studentship in 1937, and for the next two years was engaged in research on properties of dielectrics

at centimetric wave-lengths under Prof. (now Sir) C. D. Ellis. In 1939 he joined the Air Ministry Research Establishment, Dundee—the forerunner of the Telecommunications Research Establishment and the Royal Radar Establishment. He was later seconded to the Royal Air Force to assist with the installation of the coastal radar chain. In 1943 he joined the staff at the Telecommunications Research Establishment, Malvern. From 1948 until 1954 Dr. Hutchinson was at the Royal Aircraft Establishment, Farnborough, and in 1954 he was posted to the British Joint Staff Mission (now Defence Research Staff) in Washington. He returned to the Royal Radar Establishment in 1957.

Engineering at the Queen's University of Belfast:

Prof. T. M. Charlton

MR. T. M. CHARLTON, who has recently been appointed to the chair of engineering at the Queen's University of Belfast, was born in 1923. He was educated at Doncaster Grammar School, Derby Technical College and University College, Nottingham, and graduated in 1943 as an external student of the University of London. After graduating, he joined the Ministry of Aircraft Production at the Telecommunications Research Establishment, Malvern, as junior scientific officer. In 1946 he became an assistant engineer of Newcastle upon Tyne, and in 1954 he was appointed a lecturer in the Department of Engineering, University of Cambridge. He was elected into a fellowship at Sidney Sussex College in 1959. Mr. Charlton's work has been mainly in the theory of structures and has included the development of energy methods, in particular the method of complementary energy and uses of