NEWS and VIEWS

Mathematics at Canberra : Dr. B. H. Neumann, F.R.S.

Dr. B. H. Neumann has been appointed to the newly established chair of mathematics at the National University of Australia, Canberra. Bernhard H. Neumann was born in Berlin in 1909. He received his early academic training at the Universities of Freiburg and Berlin, where he obtained the degree of Dr. phil. in 1932. Soon afterwards he left Hitler's Germany and continued his research work at Cambridge, where he graduated Ph.D. in 1935. His first teaching appointment was at University College, Cardiff (1937–40). This was followed by war service from 1940 until 1945. After the War he joined the staff at University College, Hull (1946–48). Since 1948, Dr. Neumann has been a member of the Mathematics Department at Manchester, first as a senior lecturer and later as a reader. Neumann's published work is almost exclusively devoted to the theory of groups. He has enriched this important branch of modern algebra by outstanding contributions published in numerous articles, in which he lucidly expounds his results, solves old problems and poses new ones. His achievements have been recognized by academic distinctions which include the Adams Prize (1951–52), the D.Sc. degree at the University of Manchester (1954) and the election to the Royal Society (1959). Besides his creative powers, Dr. Neumann possesses a remarkable talent to inspire young mathematicians and to guide them through all the stages of their career as research workers. He will no doubt attract to Canberra a team of enthusiastic collaborators. Chief among these will be his wife, Dr. Hanna Neumann, who is well known for her own work on group theory.

Engineering Science at Oxford : Prof. A. Thom

Prof. A. Thom is to retire from the chair of engineering science at the University of Oxford, which he has held since 1945. Prof. Thom is an engineer with an aeronautical bias, who worked in the Royal Aircraft Establishment, Farnborough, during the whole of the Second World War, after a long period as a lecturer at the University of Glasgow. He is best known for his skill and inventiveness in the field of numerical analysis by desk computers. In particular, he has obtained a large number of useful results in theoretical fluid dynamics and other subjects by his 'squares' method, an alternative to Southwell's 'relaxation' approach. He is also well known for a number of important wind-tunnel investigations.

Prof. D. W. Holder

Dr. D. W. Holder, who is to succeed Prof. Thom in the chair of engineering science at the University of Oxford, is like him in that he is an aeronautical engineer, who has built up since the War a remarkable research team in high-speed aerodynamics at the National Physical Laboratory. This team has been responsible for a large proportion of the fundamental advances in transonic, supersonic and hypersonic gas dynamics in Britain since 1945. The research facilities which he has built up have been truly impressive, but his contributions towards interpretation of the results have been equally important, notably in the field of shock-wave boundary-layer interaction.

Current Research and Development in Scientific Documentation

A recent issue of *Current Research and Development in Scientific Documentation*, issued by the National Science Foundation, lists 159 research projects in 99 organizations, compared with 61 in 39 organizations a year ago (No. 7. Pp. viii+153. Washington, D.C.: Government Printing Office, 1960. 65 cents). Of these 17 are listed under information requirements and uses; 45 under information storage and retrieval; 26 under mechanical translation; 17 under equipment; and 54 under potentially related research which is not directly connected with scientific documentation, but which may influence such work in the future. The present issue is provided with a detailed subject index and an introductory statement to each section directing attention to new work and to closely related projects reported in other sections. In the first section may be noted the study by the International Federation of Documentation of the availability and value of scientific conference papers and proceedings; a study of the availability and publication of scientific information contained in unclassified Government research reports; studies of the use of photocomposition and of microform publication, of the information needs of scientists in the field of psychopharmacology and of the need for an abstracting service in soil and water technology. In information storage and retrieval most of the effort is concentrated on systems design, but there is growing interest in evaluation and comparison of the newer systems, in more theoretical work on systems design and in mechanized processing of complete texts. Mechanical translation research up to the present has been mainly concentrated on the problems of lexicon and the passing of the source languages, principally Russian and English, with relatively little attention to the synthesis of the output language. The most noticeable trends are the increasing number of languages under study and the increasing breadth and generality of the theoretical work. Under equipment, particular emphasis is being placed on the development of storage devices and of output components.

Education and Industry

In an article that appeared in a recent issue of *ESSO Magazine* (9, No. 4, Autumn, 1960), Sir Hugh Beaver suggests that people in Great Britain can no longer afford to argue about education for management, and that it is no longer realistic to call on "industry to exercise the greatest care in recruiting graduates", in order to allow the schools to have a proportion of the 'good people' for advanced studies. He argues that to many, what matters are the financial attractions, and says that no one should question or deplore such an attitude in any individual, now that it has been shown that industry offers as