

methods of measurement. Blood counts remain more or less constant until the subject has had a sufficient dose to produce irreversible damage and no institution in Great Britain now relies solely on this method of control. The dangers from internal radiation, which arise only when radioactive materials are inhaled or eaten, in general entail similar risks: that is to say, quantities of the order of 1 mc. inside the body are to be regarded as dangerous. But here, of course, the chemical properties of the isotope, which determine where it is deposited and how fast it is eliminated, its half-life and the nature of its radiations are also important considerations in assessing the dangers. The bone-seeking isotopes such as strontium are by far the most dangerous, as they irradiate the bone marrow. In concluding, and in answer to questions, Dr. Loutit expressed his opinion that emitters of soft β -radiation such as carbon-14, tritium and sulphur-35 are not particularly

dangerous, and precautions similar to those taken by bacteriologists when dealing with pathogenic organisms would protect workers. He reminded the audience, however, that whereas pathogenic organisms accidentally let loose in the laboratory can be destroyed by disinfectants or other agents, radioactivity cannot be destroyed.

In attempting to assess the value of the meeting, the present writer is under a difficulty. A symposium devoted to technique rather than to a field of research brings together workers on very different subjects, whose common interest hangs on the somewhat slender thread of common technique. A smaller proportion of those attending the meeting are therefore able to comment pertinently on each piece of research than occurs when the subject is common to all. There can be no doubt, however, that the meetings were much enjoyed by those present.

R. F. GLASCOCK

NEWS and VIEWS

Textile Chemistry at Manchester :

Prof. R. H. Peters

THE Manchester College of Technology has trained students of textile chemistry ever since 1905, and the pioneer work of Prof. Knecht, of J. Huebner and of F. Scholefield is well known. The industry has always found great difficulty in recruiting skilled technologists, and it has sometimes failed for years to make full use of discoveries which have been made by the big firms and by research associations such as the Shirley Institute and the British Rayon Research Association. It is possible that if the textile industry of Britain could exploit the new synthetic fibres and the new methods of dyeing and finishing, it might have a chance of re-establishing something of its former position of pre-eminence in those world markets in which it cannot compete so long as it restricts itself to traditional fibres and the old-fashioned techniques which are now so well known to its competitors.

The appointment of Dr. Raymond Harry Peters to be the first professor of textile chemistry in the Manchester College of Technology may therefore prove to be of great importance to the textile industry as a whole. Dr. Peters obtained the degree of bachelor of science with first-class honours in chemistry at King's College, London, in 1939 and took his Ph.D. in 1942. He was in the Dyestuffs Division of the Imperial Chemical Industries, Ltd., at Blackley during 1941-47. He took a degree in mathematics in the University of Manchester in 1949 and then returned to Blackley. He became head of the Dyeing Research Section of I.C.I. in 1952. He has published a number of scientific papers and in 1953 he was awarded the medal of the Worshipful Company of Dyers. Prof. Peters will have at his disposal a splendid new dyehouse which has been very well equipped, thanks to the generosity of Courtaulds and the co-operation of a number of firms, in particular Messrs. Mather and Platt, Ltd. He should be able to build up a strong postgraduate research school in co-operation with local industry, and it is much to be hoped that his department will attract students who can be trained in this vitally important branch of technology, and so help the textile industry of Britain to bring itself up to date.

Electrical Engineering at Swansea :

Prof. W. Fishwick

THE chair of electrical engineering which was recently established at the University College of Swansea has been filled by the appointment of Dr. W. Fishwick, who is at present a lecturer in engineering in the University of Edinburgh. After obtaining first-class honours in the Mechanical Sciences Tripos at Cambridge in 1940, together with the Wynne Prize from Pembroke College, Dr. Fishwick joined the staff of the Telecommunications Research Establishment, where he was concerned first with the development of radar equipment and later with radio counter-measures. In 1944 he was commissioned for special duties with the R.A.F. and commanded a scientific intelligence unit operating in North-West Europe. Dr. Fishwick returned to Cambridge in 1946 as a research student under Prof. E. B. Moullin and Mr. C. W. Oatley, where he developed a novel type of mass-spectrometer using radar techniques which was capable of following very rapid changes in gas composition. Upon the completion of this work, for which Dr. Fishwick was awarded the degree of Ph.D., he took up a post with Imperial Chemical Industries, Ltd., at Manchester in 1948, where he was placed in charge of a laboratory for the development of instruments concerned with the automatic control of chemical plant. Two years later he was appointed to his present post at Edinburgh. Dr. Fishwick's more recent researches have been concerned with automatic control theory and with certain machine-tool vibration problems. It is peculiarly appropriate that the first occupant of the new chair should be actively interested in the field of automatic control, for many of the steel, chemical and other plants which are situated in the immediate neighbourhood of Swansea make extensive use of such controls.

Social Responsibilities of Scientists

In a paper presented to the American Philosophical Society (*American Scientist*, 43; July 1955), Prof. J. H. Hildebrand, of the University of California, examines the social responsibility of scientists. They should first try to extend the boundaries of knowledge and be able to answer Benjamin Franklin's question,