

The Geological Society of London elected him a foreign member, and the Royal Geographical Society an honorary member. Germany, France and Belgium paid him tribute.

The Stanford campus is no longer graced by his striking figure and courteous manner, but his example

remains of how old age may best be spent, in exercise, study and cultivation of the affection of one's fellows. He closed his full life, as he closed his speech accepting the Penrose Medal, "with a cheer to Youth that carries on in the search of Truth".

HOWEL WILLIAMS

NEWS and VIEWS

Wool Industries Research Association: Mr. B. H. Wilsdon

THE resignation of Mr. B. H. Wilsdon offers the opportunity to place on record some of the work accomplished during his fourteen years directorship of the Wool Industries Research Association. His experience before going to Torrington included research at Oxford, varied activities as professor of chemistry at Lahore, and five years as superintendent of laboratories at the Building Research Station of the Department of Scientific and Industrial Research. He found the vitality at Torrington at a low ebb; but under his stewardship the output of research increased steadily in volume and quality, and the chief successes of the teams he gathered together and encouraged are impressive. Torrington became the birthplace of partition chromatography. Described by Sir Robert Robinson as the greatest advance in protein chemistry since the work of Fischer, it spread rapidly to many important laboratories faced with complex mixtures of organic and inorganic substances. By its aid and by other methods, significant contributions were made to our knowledge of the chemical constitution of wool. In the more technical field, the dry chlorination process for producing non-felting wool was ready at the outbreak of war in 1939, together with the 'Warnorm' certification mark, to help ensure the unshrinkability of the socks and underwear supplied to the Forces. Another war-time activity, carried forward with great energy, was the impregnation of fabrics with active charcoal, originally as an anti-gas measure, but later used extensively to absorb bad odour from anaerobically dressed wounds. Noteworthy advances were also made in the application of physics: a clearer insight into the physical factors underlying the comfort of wool clothing was gained, and studies on machinery and operational research pointed the way to post-war economies in woollen carding and worsted drawing. In addition, statistics was brought to bear on testing methods and on wool metrology. All this work was widely appreciated in Australia and in the United States, but less so in Great Britain. This is a common occurrence in the life of a growing institution; even the active workers do not appreciate the full value of their collective efforts. Later recorders will, it can be safely assumed, point to Mr. Wilsdon's directorship as a very bright period in the scientific history of Torrington.

Social Implications of Scientific Progress

AN important event of the year for the world of science is the three-day Convocation at the Massachusetts Institute of Technology, Cambridge, Mass., which opened on March 31. The general theme of the Convocation is "The Social Implications of Scientific Progress at the Mid-Century Point", and two opening speeches were delivered by Mr. Winston Churchill and Mr. Harry S. Truman. Addresses given by eminent men from many walks of life and from

various parts of the world fall under the following six main divisions: "The Problem of World Production"; "The Problem of the Underdeveloped Area"; "Science, Materialism and the Human Spirit"; "The Role of the Individual in a World of Institutions"; "Specialization in Twentieth Century Education"; "The State, Industry and the University". Among the British speakers are Sir Henry Tizard, chairman of the Defence Research Policy Committee of the Ministry of Defence; Lord Hailey; and Sir Richard Livingstone, president of Corpus Christi College, Oxford. Speakers from other countries include Sir Ramaswami Mudaliar, president of the United Nations Economic and Social Council, and Prime Minister of Mysore State; M. Pierre Ryckmans, Belgian representative on the Trusteeship Council of the United Nations; Mr. Carlos Contreras, president of the National Planning Association of Mexico; and Mr. Oswaldo Aranha, formerly Brazilian Ambassador to the United States. At the end of the Convocation, the ceremony of inauguration of Dr. James Rhyne Killian, jun., as president of the Massachusetts Institute of Technology, takes place, and one of the addresses of welcome to Dr. Killian is by Mr. David A. Shepard, honorary secretary in London of the Institute, and chairman of the Anglo-American Oil Co.

Manchester Joint Research Council: Report for 1948

THE Manchester Joint Research Council, established in 1945, has for the first time issued a printed annual report. This report, covering the year 1948, pays tribute to the work of Mr. A. H. S. Hinchcliffe, as chairman, and Sir John Stopford, as treasurer, during the first, formative years, and they have now been succeeded by Sir E. Raymond Streat and Sir Charles G. Renold, respectively. One of the most successful ventures of the year was the meeting in February, addressed by Dr. A. King, which was a result of the efforts by the Council to supply information to the Department of Scientific and Industrial Research on the need for sponsored research activities in the north-west of England. The resulting discussion further indicated that for many years to come the Council is likely to be closely concerned with improving the technology of the small firm and with encouraging accelerated development and inventiveness in industry generally. In an effort to ascertain how the Council might apply itself to discovering the hindrances which prevent firms from using knowledge already available, Sir Henry Tizard was invited to the October meeting of the Council. Sir Henry's remarks reinforced the opinion that an objective and scientific investigation of the needs of industry in this area would be a substantial contribution; and at the annual meeting on February 28, the joint honorary secretary, Mr. J. Ainsley, indicated the broad pattern of the inquiry which the Council proposed to pursue. The intention was for a team of experienced men to

visit a cross-section of industry, some three hundred or three hundred and fifty firms, and to investigate how scientific information reaches a firm, the obstacles, and the methods by which the obstacles might be overcome. The inquiry might reveal the need for a regional institute of the type of the Mellon Institute; but an attempt would also be made to assess the means whereby scientific methods and technical knowledge could immediately be applied to increase productivity. New staff would be required for the survey, and in this it was hoped that industrial establishments would assist.

Activities of Political and Economic Planning

A BROADSHEET, "Review of a Programme", issued by Political and Economic Planning (No. 289, October 16, 1948) is of general interest as, besides reviewing the progress of work outlined in a similar broadsheet in 1946, it describes the new work on which P.E.P. is now engaged. Some of this work, notably the inquiry into the future of British universities and that into the relations between Government and industry in the new context of central economic planning, is of special interest here. The first of these will draw on and develop the discussion of university training in the report on man-power policy now completed, as well as the examination of the administrative framework of the education system in the broadsheet on "Councils and their Schools". The group conducting the inquiry consists mainly of university 'dons' with a number of laymen and of corresponding members. The second inquiry, which is not yet properly under way, will examine first the assumptions that must be made about the nature of the instructions which the Government gives to industry and the conditions which make it necessary for the State to issue them. Next, the inquiry will examine in broad terms those measures of Government which affect the working of industry, before proceeding to consider the common purpose which business shares with industry, the nature of the general decisions which Government has to take, the division of responsibility between Government and industry for the execution of policy and the methods and machinery by which policy is drawn up in effective collaboration with industry. The central problem of the inquiry will be to discover how programmes can be met without the Government having to decide in detail what people are to make and where they are to work.

As regards the work already carried out, the broadsheet gives a concise review of the progress made and indicates the broadsheets or reports already published and the position of others which are in the final stages. These include a report on the engineering industries and the various broadsheets from the "Active Democracy" Group. A third major inquiry, into housing policy, is being conducted by a group formed in July 1948 to report in 1950 on the principal elements of a long-term housing policy, and particularly to define the issues, the possible alternatives and the implications involved in each.

German Jute Industry during 1939-45

IN B.I.O.S. General Report No. 17 (London: H.M. Stationery Office, 1949. 6d.) the British Jute Trade Research Association presents in co-ordinated form data on the jute industry in Germany during the period 1939-45, which has been given in two earlier main reports from the British Intelligence Objectives Sub-Committee and in other intelligence surveys.

Alternative raw materials used in this industry during the period were mainly paper; but regenerated cellulose and naturally occurring cellulosic fibres of European origin, such as green flax and green hemp, were also used. The report includes notes on the emulsifying agents, such as 'Emulphors', used in batching jute, on sizing agents in use, as well as products such as 'Preventols' used for protecting starches and jute against mildew attack. The most important treatment used for rot-proofing appears to be the cuprammonium process, and some work has also been carried out on flame-proofing and water-proofing. For impermeable finishes plasticized polyvinyl chloride, 'Igelit', was largely used, as well as emulsion coatings of polyvinyl acetate, 'Mowilith'. For water-repellent finishes hydrophobic metallic soaps were used extensively, including the proprietary emulsions of waxes and aluminium salts known as 'Ramasits'. No information was collected on the methods employed in bleaching or dyeing jute; but the report includes notes on methods in use for testing paper and textiles, particularly single-fibre testing and mechanical devices for estimating the evenness of yarns.

The Textile Institute

CO-OPERATION between textile technologists in Great Britain and the United States has been strengthened by the formation of a panel of American technologists in New York, which consists of eight leading American men of science, of whom Mr. R. J. Kerr-Muir, president of Lustre Fibres, Inc., is the chairman. The panel is intended to provide general liaison between the Textile Institute, which is the official international organisation of textile technologists, and technologists in the United States; and it is hoped that by an exchange of British and American ideas on textile education, reciprocal visits of teaching staff, a wider distribution in the United States of the *Journal of the Textile Institute* and by collaboration with publishers of similar scientific journals in America, a general advancement of technological knowledge will result throughout the whole industry. There are at present some 130 members of the Textile Institute in the United States, including more than twenty fellows and five associates. Two hundred organisations also subscribe to the *Journal*.

A new Section of the Textile Institute has been formed to serve the South Wales and Monmouthshire area, which has recently been entered by various branches of the textile industry. An inaugural meeting will be held at the South Wales Institute of Engineers, Park Place, Cardiff, on April 4 at 7.30 p.m., when the president of the Institute, Mr. J. Foster Beaver, will speak on "The Textile Institute, Its Aims and Objectives". The new Section brings the total number of sections of the Textile Institute to fourteen.

Radio Communication and the Upper Atmosphere

THE Department of Scientific and Industrial Research has recently issued a report by Sir Edward Appleton and Dr. W. J. G. Beynon entitled "Radio Research Special Report No. 18: The Application of Ionospheric Data to Radio Communication" (London: H.M. Stationery Office, 1948; 1s. net). This publication comprises a reprint in a single booklet of two papers published by the authors in the *Proceedings of the Physical Society* in 1940 and 1947 together with material taken from confidential reports circulated during the War and now published for the first time. A large portion of the report is of