

publication on careers in technology. In 1966 the Council of Engineering Institutions would carry out, with the support of the Ministry of Technology, a major survey of the distribution, deployment, remuneration and responsibilities of professional engineers, with the view of throwing light on the nature of the work which they perform.

Ministry of Transport: Advisory Council on Road Research

IN a written answer in the House of Commons on December 13 the then Minister of Transport, Mr. T. Fraser, gave the terms of reference of the Advisory Council on Road Research as being to advise the Minister of Transport on the orientation and scope of research on roads and road traffic, including the design, construction and maintenance of the road system, traffic engineering, road safety and the interaction of the technical problems with economics, and to submit reports from time to time. The chairman is Dr. F. E. Jones and the deputy-chairman Prof. W. F. Cassie. The members include Sir Edward Dodd, Prof. G. C. Drew, Col. S. M. Lovell, Drs. J. P. Bull and A. R. Collins, and Messrs. J. Armour, A. C. Durie, S. H. Grylls, W. G. Harris, M. Holmes, O. A. Kerensky, M. Law, D. J. Lyons, J. S. McNeil, A. A. Shenfield, E. C. Williams and L. H. Wilson.

Ministry of Education and Science: Home and International Commitments

IN reply to questions in the House of Commons on December 16, the Secretary of State for Education and Science, Mr. A. Crosland, said that the Government had agreed to participate in the Intersecting Storage Rings Project at the Geneva Laboratory of the European Organization for Nuclear Research, which is aimed at increasing the effective power of the existing equipment, and had offered to the Organization for evaluation, though without commitment, a site in Norfolk for the construction of a 300-GeV accelerator; it had joined the International Agency for Research on Cancer, and was now preparing to participate in the initial phase of the International Biological Programme. In 1965 provision had been made for an expenditure of £53.6 million for Research Councils and other science votes.

Fast Reactor Agreement between Japan and Britain

AN agreement for an exchange of information and collaboration on fast reactor research and development has now been signed by Sir William Penney, chairman of the United Kingdom Atomic Energy Authority, and Mr. Kaneo Niwa, president of the Japan Atomic Energy Research Institute. Information to be exchanged concerns design and operating experience, basic physical and chemical properties of materials for use in fast reactors, reactor physics, and operating experience with certain fuels. The agreement will be effected by means of reports and visits; assistance in carrying out research and development will be given by procurement of materials and equipment and the use of facilities. There may be exchanges of staff from time to time. The progress of the agreement will be reviewed periodically at meetings between representatives of the Authority and the Institute.

United States-Yugoslavia Exchange Programme

THE U.S. National Academy of Sciences and the Council of the Academies of Yugoslavia have announced plans for a programme of exchange visits by scientists of the two countries. The agreement, which covers a 3-year period, became effective from January 1 and provides for exchanges in all the disciplines in which the two Academies are mutually competent; natural sciences, including mathematics; engineering sciences; and behavioural sciences. The new programme is flexible

in its provisions for both short-term visits by individual scientists to lecture, to conduct seminars, to survey research, or to exchange professional views and, for longer stays of up to 1 year, to carry out laboratory research or investigations in the field. Visits in each direction, totalling approximately 40 man-months per annum, are provided under the programme, with no necessary matching of either the number of exchanges or the scientific fields in which they occur. In addition to its provisions for the exchange of individual scientists, the agreement provides for co-operation between the two Academies in the field of scientific publications and documentation, including the exchange of information on research institutions and programmes and mutual assistance and advice on the exchange of books and scientific literature.

Register of Research in the Human Sciences (1962-65)

THE third edition of the *Register of Research in the Human Sciences (1962-65)*, compiled by the Warren Springs Laboratory of the Ministry of Technology, has recently been published (Pp. vi + 353. London: H.M.S.O., 1965. £1 17s. 6d. net). This new edition is almost twice as large as its predecessor and contains more than four times as many entries as the first edition. The *Register* has been compiled on the basis of information received from more than 300 sources, covering research in the social sciences and in those fields of medicine, engineering, law, architecture, economics, history and geography which relate to the social sciences, and information is included for the first time on research in Northern Ireland. The layout of the *Register* is unchanged—each entry containing a brief description of the research project, research workers, approximate starting and completion dates of the project, interim and final results, parties concerned with the enquiry and other information. It is regrettable that a separate name index has not been provided.

Training the Creative Scientist

DR. G. T. SEABORG's remarks on *The Creative Scientist: His Training and His Role* (Pp. 9. Oak Ridge, Tennessee: U.S. Atomic Energy Commission, Division of Technical Information Extension, Educational Materials Section (Dept. SS-1), P.O. Box 62, 1963) were originally addressed to the fourteenth National Science Fair at Chicago, in May 1963, but the pamphlet in which they are now published is still highly pertinent to the present situation. Dr. Seaborg's approach may be poles asunder from that of Prof. Kuhn, but his plea for greater care and interest in teaching science in its historical context in both schools and universities is fundamentally sound. Something on the lines of his pamphlet, adapted to the conditions in Britain, could contribute materially towards filling the vacant places in university science departments and towards fostering the supply of scientists with a wider outlook and greater adaptability.

Britain and the Scientific Industrial Revolution

IN his lecture, "Britain's Part in the New Scientific Industrial Revolution" (Forty-third Earl Grey Memorial Lecture delivered at the University of Newcastle upon Tyne, May 17, 1964. Pp. 19. Newcastle upon Tyne: The University, 1965. 3s.), Prof. J. D. Bernal is concerned with the industrial and social changes arising out of the ideas which sprang from the scientific revolution that followed the discovery of X-rays in 1896. This industrial revolution is characterized by the removal of any limitation on the supply of power, and immense changes in the speed and feasibility of communication. The utilization of the digital electronic computer, the applications of advances in genetics and molecular biology in medicine and agriculture, and what he terms the 'research revolution', have all played a part in making science the most rapidly growing human activity. This growth of science will transform the whole world, and Prof.