

chewan in 1958, he was professor of light electrical engineering at the Imperial College of Science and Technology, London (see *Nature*, 181, 1178; 1958). He is the first member of the University of Toronto staff to be associated solely with the new course in industrial engineering, which superseded the engineering and business course two years ago. Until now, the industrial engineering course has been administered and staffed entirely by professors attached to the Mechanical Engineering, Mathematics and other Departments. The new course covers areas of fundamental engineering and science, but is heavily weighted toward mathematics. Its undergraduates study operations research, electronic data processing, control theory, numerical analysis and probability and statistics. They also are introduced to modern work in organizational structure, financial control and industrial psychology.

#### Agricultural Economics at Nottingham :

D. K. Britton

MR. D. K. BRITTON, at present general manager, Market and Economic Research Department, Massey-Ferguson (U.K.), Ltd., has been elected to the new chair of agricultural economics at the University of Nottingham as from June 1. Mr. Britton will be head of the Department of Agricultural Economics and a provincial agricultural economist. Mr. Britton graduated at the London School of Economics and shortly afterwards was appointed statistician in the Ministry of Agriculture and Fisheries. From 1947 until 1952 he was a member of the research staff of the Agricultural Economics Research Institute, University of Oxford, after which he accepted an appointment with the United Nations Food and Agriculture Organization in Geneva. In this work he travelled widely in Eastern and Western Europe. In 1959 he returned to the United Kingdom to take up his present position.

#### Security Measures and Freedom of the Individual

AN immediate repercussion of the recent spy trial in London was the announcement in the House of Commons on March 23 that the First Lord of the Admiralty would set up a committee of inquiry to ascertain what security weaknesses existed at the Admiralty Underwater Weapons Establishment and to determine where responsibility lies for such breaches of security as have occurred. The Prime Minister, in replying, showed himself fully aware of the difficulty of holding the balance between national security and the freedom of the individual from perpetual surveillance in a free society. He quoted the Lord Chief Justice's words that ultimate security must depend always on the honesty of those who are put in a position of trust; and if a person suddenly and for gain becomes dishonest, no security measures are adequate. Existing security procedures which apply to the Government Services were reviewed comprehensively by the Committee of Privy Counsellors in 1956, and Parliament accepted these procedures as appropriate and adequate for their purposes. They are kept continually under review by the appropriate authorities, and to adopt a different procedure would involve a much greater range of inquiry about the activities of individuals. Nevertheless, Mr. Macmillan undertook to look at the matter again, and to consider whether the procedures laid down in 1956 should be tightened in any way.

#### The International Union of Geological Sciences

AT the twenty-first International Geological Congress meeting held in Copenhagen on August 23, 1960, it was decided to form an international union of geology. The International Union of Geological Sciences was founded by thirty countries at a Constitutive Assembly held at Unesco House, Paris, on March 9-10, 1961. The statutes prepared by the Organizing Committee in Stockholm in December 1960 were ratified, and the following Executive Committee was elected: *president*, J. M. Harrison (Canada); *vice-presidents*, I. I. Gorski (U.S.S.R.), L. Hawkes (United Kingdom), A. R. Lamago (Brazil), J. Lombard (France), B. C. Roy (India); *secretary*, Th. Sorgenfrei (Denmark); *treasurer*, J. A. Dons (Norway). The object of the Union is to promote international co-operation in geology, and of geology with other sciences. Application has been made for admittance to the International Council of Scientific Unions at its meeting in London in September 1961.

#### Export Problems and the Technical Chemist

A BOOKLET issued by the Association of British Chemical Manufacturers (86 Strand, London, W.C.2), entitled *European Free Trade Association: Origin Rules, Certification and Segregation of Stocks*, comprises a report of meetings in London and Manchester in June 1960. It includes addresses by W. A. M. Edwards on recent developments concerning the European Free Trade Association and the Common Market, by W. G. Harrold on the need for origin rules and by H. W. Vallender on the operation of the value rule and the associated basic materials; and also N. E. Wallace's paper on the operation of the process rules for organic chemicals, and for other sectors of the chemical industry, and those of L. J. White on the certification and control of the origin of goods and on the segregation of stocks of materials by accounting methods. There is also a note on the provision of information on origin of chemicals purchased for use in the manufacture of products for export to the European Free Trade Area. Intended primarily to assist those concerned in these export problems, these papers, and particularly that of N. E. Wallace, illustrate the technical difficulties with which the chemical manufacturer has now to contend. There is also a short bibliography of official publications, including the key document "Classification of Chemicals in the Brussels Nomenclature 1958".

#### Funds for Research and Development in Industry in the United States

A SURVEY, *Funds for Research and Development in Industry, 1957: Performance and Financing*, made for the National Science Foundation by the Department of Commerce, Bureau of the Census, is the first in a series of annual surveys to be conducted in the United States by that Bureau for the Foundation (Surveys of Science Resources Series. Pp. xiv+119. Washington, D.C.: Government Printing Office, 1960. 65 cents). More than half the total 7,200 million dollars was for research and development in the aircraft and electrical equipment industries, and 52 per cent of such work was financed by the Federal Government; 241 million dollars was for basic research; 1,514 million dollars for applied research; and 5,401 million dollars for development. Of the total, 6,060 million dollars was expended by companies employing 5,000 or more persons. Chemical and allied products; stone, clay and glass pro-