

logical journal has been published in the United States. For each individual scientist it becomes increasingly difficult to keep up with the literature, and the immediate reaction to any new item on the list of journals is one of resentment. However, it is true that, as the editors of *Toxicology and Applied Pharmacology* point out, an increasing number of toxicological investigations are carried out in industry, government departments and universities, and that it would help the workers in toxicology to have the investigations collected in a single journal rather than scattered in many periodicals. It may, in fact, relieve pressure on the space available in the existing pharmacological journals if some of the toxicological material need no longer be published there. The new journal will only publish papers written in English, and the first issue consists of papers by authors from the North American continent. The editorial board, however, includes non-American members, so that contributions by authors from other continents will obviously be welcome. The first issue of *Toxicology and Applied Pharmacology* (1, No. 1; January 1959. Pp. iv+1-118. Published bi-monthly. Annual subscription, 13 dollars or 93s. New York and London: Academic Press, Inc., 1959) contains eleven papers, mostly on toxicity tests in animals. It is well produced, but it may be regretted by some readers that the summaries of the papers are in small print, since they are the most widely read part of a journal.

Report of the Imperial College of Science and Technology, London, for 1958

THE fifty-first annual report of the Governing Body of the Imperial College of Science and Technology, London, for the year ended July 31, 1958, records a further increase in the number of students. Full-time undergraduate students numbered 1,589 and postgraduate students 848, increases of 74 and 148, respectively, on the previous year, while part-time students (nearly all postgraduates) increased from 324 to 674. The teaching staff increased from 353 to 380, bringing the total of professors and readers to 36 and 62, respectively. The growing importance of nuclear technology was marked by the appointment of a reader in nuclear technology in the Department of Chemical Engineering, and the work done in the study of automatic control systems in the Department of Electrical Engineering is being extended to take account of the needs of other departments. At the end of the session the College's proposals for a new residential block to house nearly 400 students and provide refectory and common-room space for larger numbers was approved. Besides the statement of accounts, departmental notes and lists of publications, appendixes to the report include lists of special lectures, details of staff changes and Sir Alexander Fleck's address on Commemoration Day in October 1957.

Digitizers and other Equipment for Data Processing

DATA processing schemes are generally required to handle information which is originally in analogue form, that is to say, the signal takes the form of a continuous variable. For transmitting this information it is convenient to quantize it into discrete steps and then to transmit it in digital form. A descriptive catalogue published by Hilger and Watts, Ltd., London, and entitled "Digitizers and other Equipment for Data Processing", describes the prin-

ciples of operation, and gives full technical information concerning a number of analogue-digital converters or digitizers, mainly of the type in which an input shaft drives a coded disk. Both mechanical and optical read-off systems are available. Details are also given of various ancillary equipment, including numerical displays, amplifiers and a typewriter for printing values of measured variables.

Scientific Careers in the Ministry of Supply

UNDER the title "An Invitation to Science Graduates", the Ministry of Supply and Central Office of Information have issued a booklet describing scientific careers open in the Ministry of Supply, copies of which are being sent to honours graduates in science as they qualify in British universities over the next two or three years. Besides indicating the nature of the careers, conditions of service, opportunities for promotion, the booklet gives particulars of how to apply.

Biological Effects of Space Flight

THE United States National Academy of Sciences-National Research Council has set up an Armed Forces-National Research Council Committee on Bio-Astronautics to advise the Armed Forces on matters concerning the biological or medical aspects of space exploration. The following scientists—representing different fields of endeavour in universities, private research organizations, and the Armed Forces—have been appointed to the Executive Council: *Chairman*, Dr. Otto H. Schmitt (Department of Physics, University of Minnesota); *Vice-Chairman*, Dr. Melvin Calvin (Department of Chemistry, University of California, Berkeley); *Members*, Dr. Howard J. Curtis (Department of Biology, Brookhaven National Laboratory), Dr. Paul M. Fitts (Department of Psychology, University of Michigan), Brig.-Gen. Don D. Flickinger (Directorate of Life Sciences, Air Research and Development Command), Dr. John D. French (Department of Anatomy, University of California Medical Center, Los Angeles), Capt. Charles F. Gell (Office of Naval Research), Dr. James D. Hardy (U.S. Naval Air Development Center, Johnsville, Pa.), and Col. Robert H. Holmes (Research and Development Command, Office of the Surgeon General, Department of the Army). Administrative responsibility for the Committee has been vested in the National Research Council's Division of Medical Sciences, under the chairmanship of Dr. R. Keith Cannon. The other members of the Committee are Dr. Sam F. Seeley (secretary) and Major Kay Cutler, of Air Research and Development Command. The full Committee on Bio-Astronautics—which will consist of more than a hundred members, of whom at least half will be nominees of the Armed Forces—will meet periodically to review scientific and technical problems, exchange information, and establish liaison between investigators with allied interests. It will concern itself with any field of science or of technology bearing upon bio-astronautics, including pertinent aspects of astronautics, biology, chemistry, medicine, physiology, psychology, and related interdisciplinary sciences.

The Association of Consulting Scientists

THE Association of Consulting Scientists has recently been formed, to act as a clearing bureau for inquiries for independent scientific services. Member-