

universities were facing, and in which experiment was needed, was that of the social uncertainty of the student: this might be particularly difficult while the new universities were still small.

Computers in Industry

A VALUABLE service to all who are interested in the use of computers in industry and commerce has been performed by the Library of Watford College of Technology. Following a symposium, which was held at the College during September 1963, under the auspices of the Watford and District National Productivity Year Committee, two booklets have been prepared which should be useful to many people in industry and commerce. The first, *A Select Bibliography on Computer Applications in Commerce and Industry*, has been prepared by C. R. Randall to show the uses of computers over a wide range of industries. References are to books and articles in journals and are up to date. The bibliography is intended for readers who are not computer specialists but who wish to obtain a basic knowledge of computers and applications in their own specialist fields. The second, *A Directory of Computer Service Bureaux in the United Kingdom*, has been prepared by J. T. Graham, and gives information about the geographical coverage of many bureaux, their charges, the services they provide, whether or not there are penalty clauses for work not completed on time, and the advisory and technical research services available. The main gap in coverage is the computer time available from governmental and educational establishments throughout Britain. The booklets may be obtained from the Hertfordshire County Council Technical Library and Information Service, Hatfield, Herts.

The National Central Library

THE forty-seventh annual report of the National Central Library, covering the year ended March 31, 1963, refers to progress with the foundations of the new buildings and to a considerable increase in applications for inter-library loans to 98,690 (91,311 in 1961-62)—the highest number recorded for ten years (Pp. 24 + 3 plates. London: The National Central Library, 1963). While the easier type of request, chiefly for current British books, is now dealt with locally in the regional system, the demand for the more difficult type of material such as older works, those in foreign languages or published in the United States and elsewhere, continues to increase. However, the Inter-lending Department succeeded in satisfying some 77 per cent of the applications, compared with 78 per cent in 1961-62. Of the satisfied applications, 15,743 were from university libraries, 10,341 from special outlier libraries, 2,504 from Government departments and 4,066 from overseas. Besides the 15,743 loans just noted made by or through the National Central Library to university libraries, the university libraries made 17,855 loans at the direct request of the National Central Library and lent a further 16,381 as members of regions to libraries in that region or to libraries outside their region. Loans to libraries overseas totalled 3,443, and 2,686 items were borrowed—the corresponding figures for 1961-62 were 3,699 and 2,550; 603 photocopies were supplied and 936 obtained (633 and 786 in 1961 and 1962). Acquisitions by purchase totalled 7,902 volumes (1,011 for adult class purchases), 6,891 being current British Government publications, 636 American books and 628 works in foreign languages. Catalogued books are now estimated at 214,000 with some 46,000 uncatalogued. The Treasury grant was increased from £75,000 in 1961-62 to £82,500, including £6,500 for renting a building at Woolwich Arsenal, which was formally occupied in November 1962 as an overflow bookstore, and which will facilitate the later acceptance of larger acquisitions of material in foreign languages and older British books. The Executive Committee, however, considers that the

Library's income still falls far short of what is needed for it to function efficiently as a national lending library and centre of library co-operation.

Melting Points of the Metal Oxides

Compilation of the Melting Points of the Metal Oxides, by Samuel J. Schneider, deals comprehensively with the literature on the melting points of the metal oxides (National Bureau of Standards Monograph 68; October 10, 1963. Pp. 31. U.S. Government Printing Office, Washington, D.C. 25 cents). It includes a critical evaluation of the published data as well as the designation of certain preferred values. Chemists and physicists, particularly those involved in high-temperature applications, will find this Monograph especially valuable. It represents the first step in a programme recently initiated by the National Bureau of Standards to re-evaluate these melting points. The programme tentatively includes the acceptance of previously published values after experimental verification, as well as accurate determinations of ill-defined or completely unknown melting points. Monograph 68 presents the melting points of 70 metal oxides as given in the literature published up to January 1963. It gives both the original melting point and the equivalent value based on the International Practical Temperature Scale of 1948. Information on pertinent experimental details, such as the method of temperature measurement, purity, furnace type and environmental conditions, is included. The ultimate aim of the National Bureau of Standards programme is to secure national and, it is hoped, international recognition of the melting points of several specific oxides for use as calibration standards.

Radioactive Fall-out

RECENTLY a report has been published by R. S. Cambridge and Miss E. M. R. Fisher, of the United Kingdom Atomic Energy Authority, entitled *Radioactive Fallout: Short-lived Fission Products in Air and Rain, August 1962-April 1963 (AERE-R4384)*. Pp. ii + 32. London: H.M.S.O., 1963. 5s. 6d. net). This report is the most recent of a series, extending over several years, and covers the period following the tests carried out by the United States in the Pacific, which started in April 1962, and the U.S.S.R. tests of 1962. The amounts of total beta, barium-140, iodine-131 and zirconium-95 activity were estimated in atmospheric dust and rain-water derived from five stations in Great Britain, and in troposphere samples, collected by aircraft over the eastern Atlantic. Brief notes on the sampling media and methods are included. The American tests gave no significant amounts of barium-140, but this isotope was detected fourteen days after the resumption of testing by the U.S.S.R. It is interesting that there was a considerable increase in the amount of barium-140 washed out in snow, in late December and early January, without a correspondingly marked increase for zirconium-95; in addition, the debris arrived from the testing site in a very few days. No cause is suggested for this phenomenon. All the data with which this report is concerned are tabulated in considerable detail, and graphs are also included where applicable.

Drugs and the Health Services

Two recent publications have directed attention to the central part played by drugs in the development of an effective health service. The first, issued by the Association of the British Pharmaceutical Industry, London, is purely factual and shows that, contrary to popular belief, the percentage of money expended on pharmaceutical services related to total National Health Service expenditure has shown no significant change over the past ten years (*Facts on Drugs: Information on Drugs and the National Health Service*. Pp. 16). 70 per cent of to-day's prescriptions could not have been written in 1935; the