

clearance of the site began on August 16 and the machine is expected to operate in 1965. The total cost of machine and building is estimated to be £1,600,000.

#### The Institute of Physics and the Physical Society

THE second annual report of the Council of the Institute of Physics and the Physical Society, presented to and adopted at the annual general meeting on July 10, records a total membership in all grades of 9,120—an increase of 400 on the previous year (Pp. 24. London: The Institute of Physics and the Physical Society, 1962). The number of candidates entering for the graduateship examination in 1961 greatly exceeded that expected and of the 239 candidates 64 were successful. The success of the appeal for the Physics Trust Fund made in 1960 has enabled the work directed at improving the teaching of physics to be increased greatly and some £25,000 a year is now spent on educational work. At the request of the Royal Society, the Council appointed a British Committee on Physics Education, with Sir Nevill Mott as chairman, to consider all aspects of physics education in Britain. A committee, under the chairmanship of Prof. R. V. Jones, was appointed to prepare a report on "Problems facing University Physics Departments" and as part of its task has prepared evidence for the Council to submit to the Robbins Committee on Higher Education (see *Nature*, 193, 911, 922; 1962).

#### Units and Standards of Measurement used at the National Physical Laboratory

THE units and standards of measurements used at the National Physical Laboratory, Teddington, are described in the series of booklets entitled *Units and Standards of Measurement Employed at the National Physical Laboratory* (1: *Length, Mass, Time-Interval and Frequency-Angle, Volume, Density and Specific Gravity, Gravity, Force Pressure and Hardness*. 2: *Light*. 3: *Electricity*. 4: *Temperature*. London: H.M.S.O. 1s. 6d. net each). A completely revised third edition of the first booklet, which deals with length, mass, time-intervals and frequency, has recently been published (1962). The fundamental mechanical units of measurement together with angle and the derived units of volume, density, force and pressure in both the International System of Units and the yard/pound system are discussed, and the standards and bases of measurement used in work involving the units are indicated. In addition, the absolute value of the acceleration due to gravity at the Laboratory and the measurement of hardness are briefly dealt with. The most up-to-date definitions of the metre, yard and pound are given. The second booklet in the series, *Light*, published in 1956, deals with units and standards concerned with photometry, colorimetry and radiation, and the third, *Electricity*, published in 1960, describes the electrical units and the standards by means of which the electrical units are determined and preserved. The fourth booklet, *Temperature*, published in April this year, is an English translation of the full text of the International Practical Scale of Temperature adopted by the International Committee of Weights and Measures in May 1960. It is emphasized that the scale is not a revision of the 1948 scale but only an amended edition of the same scale, the numerical values of temperatures remaining the same as in 1948. The departures of the 1960 text from that of 1948 are summarized separately in an appendix.

#### Teddington Products Directory

A NEW directory of products is available from Teddington Autocontrols Ltd., Sunbury-on-Thames, Middlesex (*Products Directory*. Pp. 24. Sunbury-on-Thames: Teddington Autocontrols, Ltd., 1962). Sectionalized under appropriate headings, the publication describes the complete range of automatic control instruments manufactured by the Company. Each instrument is accompanied by the relevant data sheet.

#### Scientific Research in France

THIS comprehensive reference work on scientific laboratories in France, first issued five years ago, is arranged under international establishments, then under the academic region of Paris, followed alphabetically by those of the several provinces (Office National des Universités et Écoles Françaises. *Répertoire des Laboratoires Scientifique*. Pp. 578. Paris: Services d'Édition et de vente des Publications de l'Éducation Nationale, 13 rue du Four). The international establishments comprise the European Organization for Nuclear Research and the European Community for Nuclear Energy (Euratom), and besides names of directors and heads of divisions the information given includes numbers of research workers, scope of present work and lists of recent publications. Information given for the Academic Region of Paris includes first the professors and directors in the Faculty of Science of the University and in other university departments, then the staff of the National Centre for Scientific Research, followed by corresponding information on the establishments of the Prime Minister and of the other Ministries. Some information on publications is included. For each of the provinces the information is arranged similarly, that for the Faculty of Science being given first, followed by information for other scientific establishments. There are an abridged index of scientific staff and alphabetical indexes of subjects and equipment.

#### Population Statistics for England and Wales: First Quarter for 1962

THE Registrar General's *Quarterly Return for England and Wales—Births, Deaths and Marriages; Infectious Diseases; Weather; Population Estimates, quarter ended 31st March 1962*, shows that the increase in births is not slackening (No. 453, 1st Quarter 1962. Pp. 28. London: H.M.S.O., 1962. 2s. 6d. net). 220,710 births were registered in the first quarter, giving a crude rate of 19.4 per thousand population, as against 17.9 in the previous quarter. If this increase were to continue the number of births in 1962 is likely to be between 850,000 and 875,000, that is, nearly as large as in 1947. It is likely that an increase of this size is an indication of rising marital fertility: the number of births having climbed steadily, while the number of marriages has remained constant. Infant mortality at 23.1 is an all-time low for a first quarter. Mortality for the first quarter of 1962 shows no noticeable difference from 1961.

#### Educational Services Incorporated

EDUCATIONAL Services Incorporated (ESI) is a private non-profit corporation devoted to research and development in education and is supported largely by grants from private foundations and the Federal Government of the United States. The Corporation has grown out of the activities of the Physical Science Study Committee and has developed