

£14,000 to the National Council for Diplomas in Art and Design, £6,500 to the National Council for Technological Awards, and £4,000 to the Field Studies Council.

### British Space Research in 1961-62

BRITISH activities in space research in the year ending in May, 1962, are described in the *United Kingdom Report for 1961 to the I.C.S.U. Committee on Space Research* submitted by the British National Committee on Space Research to the fifth meeting of the Committee on Space Research in Washington during April 30-May 9 (Pp. 23. London: The Royal Society, 1962). The report gives a good summary of the varied investigations in progress, which are classified under the following headings: tracking and data recovery; atmospheric structure and composition; radio propagation and the ionosphere; geomagnetism; orbital analysis; micrometeorite studies; cosmic radiation; electromagnetic radiation and astronomy. There is also a selected list of more than seventy British papers published in late 1960 or 1961 on these and related subjects. The most striking event of the year under review, however, came at the very end, with the launching of the first Anglo-American satellite, *Ariel 1*, on April 26, and the booklet includes a photograph and cutaway drawings of *Ariel*. An appendix gives details of the experiments to be flown in the second Anglo-American satellite, which is to measure galactic noise, atmospheric ozone and the flux of micrometeorites.

### Uniform Time and Constant Frequency for the Year 1963

FOLLOWING the decision of the International Committee of Time at Berkeley, in August 1961, and the general assembly of the Union Radio Scientifique Internationale at London, in September 1960, and the Study Group VII of the Comité Consultatif International Télégraphique in Geneva, during April-May 1962, the International Bureau of Time consulted the observatories which have caesium atomic resonators with the view of comparing their astronomical observations. It has now calculated the nominal value of the frequency to transmit during the year 1963 as  $-130 \times 10^{-10}$  with regard to the scale of time such that the frequency of caesium has the value:  $f(\text{Cs}) = 9,192,631,770$  c/s. The value indicated will not change during the course of 1963. It is the same as the 1962 value. The International Committee of Time, the Union Radio Scientifique Internationale and Study Group VII of the Comité Consultatif International Télégraphique recommend that the value of the frequency indicated by the International Bureau of Time be utilized by the organizations desiring to transmit uniform time and constant frequency.

### Personnel Management

AN important development in the activities of the Institute of Personnel Management as shown in its annual report for 1961-62 is the increasing attention it is now giving to overseas contacts (Pp. 28. London: Institute of Personnel Management, 1962). Among the projects the Institute will undertake during 1963 to celebrate its jubilee is the foundation of a senior lectureship in industrial relations at University College, Ibadan, in Nigeria. The Institute already has about 600 overseas members, and during the past year the Institute's officers have visited several countries including India, Cyprus and Israel. Links with European personnel managers have been strengthened during the year, these having been stimulated by Britain's possible entry into the European Economic Community. European salary structures featured at the Institute's Conference in May, and labour relations in the European Economic Community were discussed at the South-West Regional Conference in April. At the end of June, a two-day meeting of chief personnel managers from West Germany and Britain was held in London and it is proposed to hold a similar meeting in Germany in 1963. In June a meeting was called by

the Organization for European Co-operation and Development to discuss the formation of a European Personnel Management Group for liaison between different institutes and associations and for the exchange of information about personnel practices in the different countries.

### Careers in Biochemistry

THE Biochemical Society has published a revised version of the booklet *Careers in Biochemistry*. It starts by describing what biochemists do and the various types of laboratories in which they work. There are sections on educational qualifications and professional training, on opportunities and prospects, and on salaries. A short reading list is provided. This booklet should be very helpful to boys and girls considering taking up biochemistry and to those responsible for advising them. It is obtainable, price 2s. post free, from the Administrative Secretary, the Biochemical Society, 20 Park Crescent, London, W.1.

### National Museum of Wales

FOR the first time in thirty years, extensions are being built for the National Museum of Wales, and a public appeal for at least £150,000 towards the cost has been launched. The Museum at Cardiff is less than half complete, and the present collections have outgrown the space available in which to exhibit them. Congestion is especially severe at the Welsh Folk Museum at St. Fagan's, and in the Welsh Museum's School Service. The building of the new wing has been authorized by the Government and the Treasury will meet 90 per cent of the cost. It is hoped that the appeal to the public will be successful—£91,697 was received before launching it.

### Museum of Applied Arts and Sciences, Sydney

WITH a striking original design on the cover, the annual report of the Museum of Applied Arts and Sciences, Sydney, for the year ended December 31, 1961, is a record of much activity (Pp. 24. Sydney: Museum of Applied Arts and Sciences, 1962). The increased attendances are attributed to two main factors: first, a planned advertising programme; and secondly, that during the year under review special efforts were made to attract more organized parties from secondary schools. It was also in 1961 that Royal Assent was given to an Act which altered the name of the institution from Museum of Technology and Applied Science to Museum of Applied Arts and Sciences. Re-organization of the exhibition staff has permitted a greater degree of specialization according to special qualifications and talents. This has resulted in the formation of the nucleus of a design section, charged with the task of design in general as it affects museum activities of any kind and of co-ordinating the various contributory skills, for example, artist, ticket-writer, carpenter or painter. The chief event of the year in the exhibition galleries has been the re-display of the arms and armour collection.

### Associated Electrical Industries' *Electron Microscopy*

ASSOCIATED Electrical Industries' first scientific film, *Electron Microscopy*, which received four awards at the second International Industrial Film Festival in Turin in 1961, has now received the Nikola Tesla gold medal. This was the premier award at the third International Festival of Scientific and Technological Films in Belgrade, Yugoslavia. *Electron Microscopy* shows the principles, construction and operation of the electron microscope and the techniques of preparing specimens. A number of uses of the machine in research and industry is demonstrated, including the application of the image intensifier. The latest scientific film to be made by Associated Electrical Industries, *Analysis by Mass*, has been selected for showing at the annual meeting of the American Association for the Advancement of Science in Philadelphia at the end of December.