

north and west of Blueberry Mountain and of an area north of Hotchkiss. Accumulation of records of ultra-violet solar radiation with the thorium photo-cell continued, and a study is being made of the relative response at different wave-lengths of the three photo-cells used in the investigation. Problems of biological cycles, particularly the alternate prevalence and scarcity of forms of wild life, are being examined, including both the rabbit cycle and the collection of grouse material. A list of publications of the Research Council is appended.

#### National Foundation for Scientific Research, Brussels: Annual Report for 1949-50

THE twenty-third annual report of the National Foundation for Scientific Research, Brussels (pp. 196; 1950), covers the year 1949-50, and, besides lists of publications and of members of the scientific commissions, includes notes on the work in progress at Brussels, Ghent, Liège, Louvain, Mons and the Royal Military School. This has included studies on the following topics: the separation of isotopes by thermodiffusion in the liquid phase, the properties of uranium salts, the metallurgy of nuclear pure uranium, the preparation of pure graphite, heavy water, geological applications of radioactivity, neutrons, thick photographic emulsions, the preparation of uranium fluoride and hexafluoride, the variation of intensity of a pencil of neutrons with distance in terms of the medium interposed, the absorption of neutrons and the technique of the photographic plate. In addition, there have been some biochemical investigations, and studies in mass spectrography, the separation of isotopes, slow neutrons and nuclear isomerism, and the construction of a high-tension cathodic oscillograph and a linear accelerator of protons. In the financial statement, besides research grants totalling 3,125,000 francs for the year, the National Foundation has approved a supplementary grant of 2,000,000 francs for a Franco-Belgian expedition for submarine exploration, and 'extraordinary grants' of 212,971 francs to the University of Liège for the acquisition of a camera for cinematographic registration of rapid physical phenomena. Other grants are: 250,000 francs for the construction of an apparatus for X-ray emission and absorption spectra; 100,000 francs to the University of Liège for transporting and installing at the scientific station of the Jungfrauoch the colostat and large infra-red spectrometer from Cointe Observatory; 175,000 francs for sociographical research at the University of Brussels; 250,000 francs to the University of Louvain for a campaign of excavation at Alba Fucens; and 250,000 francs for equipping the four universities for biological research with radioisotopes. Besides a full list of publications by recipients of grants during the year 1949-50, there is appended a list of recipients of grants for 1950-51 and of their research objectives.

#### American Institute of Physics: Twentieth Anniversary

THE twentieth anniversary of the American Institute of Physics will be celebrated in Chicago during October 23-27 by a joint meeting of the founding societies of the Institute. Member societies which will hold their regular autumn technical meetings during the five-day anniversary celebration are the American Physical Society (October 25-27), Optical Society of America (October 23-25), Acoustical Society of America (October 23-25), Society of

Rheology (October 24-26), and the American Association of Physics Teachers (October 25-27). The American Crystallographic Association, an affiliated society of the American Institute of Physics, will also participate in the anniversary meeting. An all-day symposium on October 25, on the theme "Physics To-day", will include papers by Dr. Enrico Fermi, University of Chicago; Dr. E. U. Condon, retiring director of the Bureau of Standards; Prof. J. C. Slater, Massachusetts Institute of Technology; Dr. Harvey Fletcher, Columbia University; and Dr. Edwin H. Land, president and director of research of the Polaroid Corporation. The symposium will be concluded with a more general talk entitled "Physics as Science and as Art" by Dr. K. K. Darrow, of the Bell Telephone Laboratories. Senator Brien McMahon, chairman of the Joint Congressional Committee on Atomic Energy, and Dr. K. T. Compton, chairman of the Corporation of the Massachusetts Institute of Technology, will be guest speakers at a joint banquet on October 25. Included in the programme will be an industrial exhibit of scientific instruments and apparatus arranged by the leading manufacturers of scientific equipment in the United States. Further information can be obtained from the Secretary, American Institute of Physics, 57 East 55th Street, New York City.

#### New Indian Institute of Technology

A NEW Institute of Technology, the first of four such institutes which it is hoped to build in India, is in the course of being constructed at Kharagpur, seventy-two miles from Calcutta, and already more than two hundred students are attending courses in buildings already in existence on the site. It is expected that the Institute will be finally completed and equipped in about four years time, and then it will be able to take about two thousand students. Mr. Jerzy Malanowski, a mechanical engineer, has recently gone to the Institute as the first member of a team from the United Nations Educational, Scientific and Cultural Organization under the United Nations Technical Assistance plan. Mr. Malanowski's work, besides organizing the four-year course in mechanical engineering and lecturing to students, will be to help plan and construct laboratories and workshops and their equipment for the Institute. Courses will be run on similar lines to those at the Massachusetts Institute of Technology. Departments of civil and sanitary engineering, electrical engineering, mechanical engineering, building construction and architecture, metallurgy, naval architecture and marine engineering, and geology and geophysics are being set up, and students will follow a four-year course leading to the degree of B.Sc. Eventually postgraduate courses, lasting a year, will be organized.

#### Measurement of Low Temperatures

SINCE the end of the Second World War interest in the field of low-temperature physics has expanded considerably, and there are now many more physical laboratories either engaged on, or about to embark on, low-temperature research work. Though the methods of measurement of temperatures below 90° K. are well established and are fully described in the literature, it would be difficult to find, if such exists, a comprehensive statement of them in any one book or periodical. The handy reference monograph on "The Measurement of Low Temperatures" (Research Report R-94433-2-A; Physics Department, Westinghouse Research Laboratories, East Pittsburgh, Penn.;