### **NSF Earth Science Awards**

The Earth Sciences Program of the National Science Foundation is now receiving proposals for research grants that will be made in October and November, 1957. Deadline for the Receipt of proposals for work to begin in the fall or early winter is 20 May. There are no formal application blanks, but a foundation pamphlet describes the method of making application and outlines information needed in a proposal. This pamphlet may be obtained from the Earth Sciences Program, National Science Foundation, Washington 25, D.C.

### **Brussels Computation Center**

An analog computation center will be opened in Brussels, Belgium, during the early summer of 1957 by Electronic Associates, Inc., of Long Branch, N.J. The center will provide electronic analog computers and a staff of scientists for problem analysis and programming.

### Indian Engineers to Come to U.S.

Recently Ellsworth Bunker, United States Ambassador to India, announced a new program under which 900 to 1000 Indian engineers will be sent to the United States in the next 5 years to receive from 1 to 2 years of training in iron and steel technology. An agreement has been reached between the Government of India, the Ford Foundation, and representatives of the United States iron and steel industry. The Indian Government will pay the transportation costs, and the United States steel industry will provide training opportunities. The Ford Foundation will meet the students' maintenance. It has set aside about \$1 million for the first year of the project.

# World Directory of Crystallographers

The International Union of Crystallography is preparing a World Directory of Crystallographers that will contain the names and addresses of all practicing crystallographers, including advanced graduate students. It is hoped that a preliminary list can be compiled by the time of the Fourth General Assembly to be held in Montreal, 10–17 July. The secretaries of the national committees (*Acta Cryst.*, 8, 857; 1955) have been asked to prepare a list of crystallographers in their countries.

Some scientists and technologists, however, who carry on crystallographic work (including x-ray, electron, or neutron diffraction and microscopy or other techniques) are not members of scien-

tific societies having a unique crystallographic interest, and might therefore be missed. Those who come into this category are asked to send their names and addresses to Dr. W. Parrish, Philips Laboratories, Irvington-on-Hudson, N.Y.

## AEC Classified Depository Library in New York

The U.S. Atomic Energy Commission has announced that a classified depository library has been established at its New York Operations Office to serve the needs of access permittees and commission contractors in the area. The library is the first of a number of such depositories planned for various regions of the country as part of the commission's program to facilitate access by cleared personnel to classified technical information.

Persons wishing to use the library facilities must apply in advance of their visit. In the case of access permittees, this is accomplished by forwarding a copy of form AEC-403 to the office administering the permit. Contractors are required to file form AEC-277. Library users must observe the security requirements of part 95, title 10, "Safeguarding of restricted data," published in the Federal Register on 2 Feb. 1956.

The documents in the library are for reference purposes only. Information on the price and source of individual reports will be available, however. Library users may request classified literature only in categories to which they have been granted access. Library personnel will not perform literature searches, but bibliographic material, such as abstracts and indexes, will be available so that a library user can determine the exact number of the report he wishes to see and request it by that number.

The opening of the classified library at the New York Operations Office brings to four the number of AEC depositories of technical literature in the New York area. Libraries of unclassified documents were established at the Columbia University Library and the New York Public Library in 1951, and at the Office of the Atomic Industrial Forum in 1954.

# **Elementary School Workshop**

A summer Workshop in Science for Teachers in Elementary Schools is scheduled from 17 June through 26 July at Western Reserve University. Open to graduate students of education, six credit hours may be earned toward an advanced degree during the session. Principles in astronomy, biology, chemistry, geology, and physics will be emphasized. Methods of demonstration and

experiment applicable to the elementary school will be stressed.

Director of the workshop will be James C. Gray, professor and acting chairman of the biology department. Grace C. Maddux, assistant supervisor of science for the Cleveland Board of Education, is associate director. Full time members of the W.R.U. faculty and experienced teachers in the Cleveland Public School System will serve on the staff

Classes will be held at the university's Biological Station at Squire Valleevue Farm in suburban Hunting Valley, about a 20-minute trip from the campus. Application for enrollment should be made by 1 May. A limited number of scholarships are available. For further information, write to Director of Admission, Western Reserve University, 2040 Adelbert Road, Cleveland 6, Ohio.

### Topography of Greenland

A French expedition is planning a long-range exploration of Greenland in 1957–58, according to a report from the United Nations Educational, Scientific and Cultural Organization. Led by explorer Paul-Emile Victor, a group of scientists will attempt to discover whether Greenland, beneath its ice-cap, is one vast island or a number of smaller islands. Soundings through the ice will be made to help determine the general topography of the land.

### **NSF** Awards

The National Science Foundation has announced the award of 845 predoctoral graduate fellowships in the natural sciences and allied fields of the academic year 1957–58. Successful fellows were selected from 3028 applicants from all parts of the continental United States, Alaska, Hawaii, and Puerto Rico. Honorable mention was accorded 1391 applicants.

In addition to the predoctoral fellowships awarded, the foundation also announced the names of 84 winners of regular postdoctoral fellowships. (Regular postdoctoral fellowships are to be distinguished from senior postdoctoral and science-faculty fellowships, awards for which will be announced later.)

Of the predoctoral fellowships, 245 awards were made to first-year graduate students, 376 awards were made to graduate students in the intermediate years, and 224 awards to terminal-year predoctoral students. Recipients include 426 persons who have been NSF fellows during the current academic year.

The largest group of predoctoral fellowships, 185 were awarded in chemistry. In other fields the number of awards

were: physics 183, engineering sciences 114, mathematical sciences 86, zoology 64, earth sciences 41, biochemistry 33, psychology 25, medical sciences 20, botany 16, microbiology 16, genetics 13, anthropology 12, agriculture 9, astronomy 6, biophysics 6, general biology 2. In addition 14 awards were made in areas where the natural sciences converge with the social sciences.

Of the regular postdoctoral awards, 33 were made in the life sciences, 17 in chemistry, 15 in physics and astronomy, 13 in the mathematical sciences, 3 in the earth sciences, 2 in the engineering sciences, and 1 in areas where the natural sciences converge with the social sciences.

Fellows may attend any accredited nonprofit educational institution of higher learning in the United States or abroad. Predoctoral fellowships carry stipends of \$1600 for the first year, \$1800 for intermediate years, and \$2000 for the terminal year of graduate study. Regular postdoctoral fellowships carry a stipend of \$3800. All fellowships include additional allowances for dependents, tuition, and other normal expenses.

The foundation has also announced that 345 grants totaling \$13,853,350 were awarded during the quarter ending 31 Dec. 1956 for the support of basic research in the sciences, for conferences in support of science, for exchange of scientific information, and for training of science teachers. This is the second group of awards to be made during fiscal year 1957. Since the beginning of the program in 1951, 3166 such awards have been made totaling almost \$49,900,000.

# AEC Aids Nuclear Technology Training

The Atomic Energy Commission has announced approval of grants totaling \$1,193,450 to 15 American educational institutions for equipping laboratories for training nuclear scientists and engineers. The commission also has made 16 loans to universities and colleges of material such as uranium metal and neutron sources.

More than 40 proposals for grants in this category have been received by the AEC since last September. All proposals will be reviewed and evaluated, and additional announcements of awards are planned for the near future. The largest grant—\$216,950 to the University of Puerto Rico—is for the establishment there of a nuclear training center. Copies of the criteria used in evaluating institutional proposals for AEC assistance may be obtained from the Director, Division of Reactor Development, Atomic Energy Commission, Washington 25, D.C.

#### Norelco Diffraction School

The 27th Norelco X-ray Diffraction School for research and industrial registrants who can visit the Midwest will be held in the Morrison Hotel, Chicago, Ill., during the week of 3–7 June. Registration for the course will be limited to 125 for the first 4 days and to 150 on Friday, the day devoted to actual application problems when guest speakers deal with current methods used by modern plants.

Until the final day, the sessions will consist of classroom and laboratory work during which participants discuss their problems and become familiar with the use of all equipment types. The basic subjects to be covered by well-known educators and scientists include x-ray diffraction, diffractometry, and spectrography. There will also be discussions of new high- and low-temperature camera techniques, electron microscopy, and electron diffraction.

Application for attendance at the three Norelco Diffraction Schools held last year far outnumbered the available accommodations. It is recommended that those planning to attend the coming June meetings make their reservations at the earliest possible date. There is no registration fee. For information, write to Philips Electronics, Inc., 750 South Fulton Ave., Mount Vernon, N.Y.

# **Gypsy Moth Eradication**

The U.S. Department of Agriculture has announced plans for a federal-state cooperative spray program this spring to eradicate the gypsy moth from almost 3 million acres of forest land in parts of New York, New Jersey, and Pennsylvania. Spraying against this destructive forest pest from the air with DDT is scheduled to begin on about 15 Apr. and will continue to mid-June. The insecticide will be applied at the rate of 1 pound in 1 gallon of light oil to each acre treated. In area, this will be the largest single aerial spraying job ever conducted in the United States.

About \$5 million have been appropriated by state governments and the Federal Government for gypsy-moth control and eradication programs in the nine northeastern states during the current season. More than half of this amount will be used in the federal-state spray program along the southern and western periphery of the area generally infested with gypsy moth. In addition, state control operations will continue in other infested portions of the nine states.

The combined program calls for eventual complete eradication of the gypsy moth. By defoliating trees, the gypsy moth caterpillar destroys millions of

board feet of valuable timber and does great damage to forest and shade trees in recreation areas, on watersheds, and around homes. If left uncontrolled, the pest would threaten hardwood forests from Maine to the Ozark Mountains in the south-central United States.

### Chinese Birth Control Measures

The Associated Press has reported that the People's Republic of China has announced that it is starting a large-scale birth-control program. In addition, physicians are now permitted to perform abortions and sterilization operations when patients request them. The new program was described by the Minister of Health, Li Teh Chuan, in a speech to the National Committee of the Chinese People's Political Consultative Conference that was broadcast by the Peking radio. China's population is estimated at more than 600 million; it is increasing by about 15 million persons a year.

### **Proposed Legislation**

Of the many bills introduced in Congress, some have a special relevance to science and education. A list of such bills introduced recently follows:

S 872. Provide school-construction assistance to states; establish a program of scholarship aid and long-term loans to students in higher education; provide facilities assistance to institutions of higher education; provide a 30-percent credit against Federal individual income tax for amounts paid as tuition or fees to certain public and private institutions of higher education; provide assistance to and cooperation with states in strengthening and improving state and local programs for diminution, control, and treatment of juvenile delinquency; study use of conservation programs to provide healthful outdoor training for young men; establish a Youth Conservation Corps. Humphrey (D Minn.) Senate Labor and Public Welfare.

S 844. Provide program of national health insurance. Murray (D Mont.) Senate Labor and Public Welfare.

HR 3865. Provide for further research and technical assistance required for control of mosquitoes and other arthropods capable of adversely affecting the health and welfare of man. Rogers (D Fla.) House Interstate and Foreign Commerce.

H Res 130. Authorize creation of a Select Committee on Problems of Aging. Powell (D N.Y.) House Rules.

HR 3764. Provide program of national health insurance. Dingell (D Mich.) House Interstate and Foreign Commerce.