

or state laboratory director unless the applicant is an employee of the Public Health Service. In such instances, application must be approved by the medical officer-in-charge. Correspondence about these courses should be addressed to: Director, Venereal Disease Research Laboratory, Division of Special Health Services, PHS, Department of Health, Education, and Welfare, P.O. Box 185, Chamblee, Ga.

■ The *Handbook For Teaching Conservation and Resource-use*, a 450-page book just completed by the National Association of Biology Teachers, describes the best means of helping children understand the importance of natural resources. The publication was prepared by 200 teachers from 30 states. The how-to-do-it stories and 82 illustrations will be helpful to other teachers and youth leaders.

The material for the *Handbook* was collected by the NABT National Conservation Committee. Since its initiation in 1951, the project has been directed by Richard L. Weaver of the School of Natural Resources, University of Michigan. The work was financed by a grant from the American Nature Association.

The volume may be obtained from Dr. Weaver, Box 2073, Ann Arbor, Mich. The cost is \$4 per copy, but schools will be allowed a 20-percent discount. The proceeds will be used by the committee to continue its conservation education activities in the various states.

■ The Michigan State Board of Agriculture has announced that, by action of the Legislature, the name of Michigan State College of Agriculture and Applied Science has been changed to Michigan State University of Agriculture and Applied Science.

■ An appeal to the Nation's publishers to help stimulate interest in high-school mathematics and science courses has been made by the president of the National Society of Professional Engineers. In a letter addressed to approximately 800 publishers of daily newspapers, Allison C. Neff, of Middletown, Ohio, newly installed president of the 36,000-member engineering group, asked the help of the press as a first step to "stem the tide of students away from elementary mathematics, physics and chemistry."

Neff, vice president of Armco Drainage and Metal Products, Inc., asked publishers to consider these facts: (i) only about 25 percent of our high-school students now study algebra; (ii) only about 12 percent of our high-school students now study geometry; (iii) there are many small, and even some large, high schools that offer no courses in the physical sciences.

■ A special radiation biology course, one of the few offered in the United States, is being given for the second summer at the Duke University Marine Laboratory, Beaufort, N.C. The 6-wk course, which commenced 26 July, centers around study of how radiation affects living creatures. It provides background information and instruction in laboratory procedures for persons interested in radiation and radioisotope studies.

The biology division of the Oak Ridge National Laboratory is again cooperating with Duke in presenting the course. Five Oak Ridge scientists are visiting lecturers: Norman G. Anderson, physiologist; Alan D. Conger, cytologist; J. R. Totter, biochemist; Charles W. Shepard, physicist; and A. C. Upton, pathologist.

The course includes laboratory study of the effects of radiation on both sperm eggs and cell division of marine organisms, as well as its effects on mammals, animal tumors, and plant chromosomes. A cobalt radiation source supplied by the Oak Ridge Laboratory is the principal tool.

■ The University of Chicago has approved two new courses leading to the M.S. degree in radiological physics and in health physics. Both degrees will be awarded by the department of radiology, and students will be accepted in the fall quarter. Students entering these courses should have completed the equivalent of the University of Chicago B.S. degree in physics; they must, in any case, complete all of the requirements for the master's degree.

Two years' residence is required because of the broad scope of the academic program, the second year of which is spent one-half time in academic work and one-half time in service in the department at a nominal rate of pay. Two years of course work give the student a strong background in physiology, biochemistry, biophysics, anatomy, toxicology, and radiological physics. Additional information may be obtained from Lester S. Skaggs, Department of Radiology, University of Chicago, 950 E. 59 St., Chicago 37, Ill.

### Grants, Fellowships, and Awards

■ In addition to inviting Fulbright award applications [*Science* 122, 117 (15 July 1955)], the Committee on International Exchange of Persons of the Conference Board of Associated Research Councils has announced the availability of awards for lecturing abroad under the Smith-Mundt Act. In 1956-57 a limited number of grants will be provided for lecturing in about 30 countries, including, according to present plans, Brazil, Chile,

China (Taiwan), Colombia, Costa Rica, Cuba, Ecuador, Egypt, Guatemala, Haiti, Iceland, Indo-China, Iran, Israel, Korea, Lebanon, Mexico, Pakistan, Panama, Paraguay, Peru, Portugal, Spain, Switzerland, Syria, Turkey, Uruguay, and Venezuela.

Universities and colleges in these countries are expected to request American lecturers for the academic year, or occasionally for shorter periods, in a wide variety of fields. On the basis of past experience, the committee expects the science requests to be concentrated in agriculture, anthropology, chemistry, engineering, geology, mathematics, physical education, physics, psychology, and sociology.

Foreign universities usually communicate their needs to the Conference Board committee at intervals throughout the year, generally a year in advance, but in some cases only 2 to 3 mo before the starting dates of the lectureships. Under these circumstances, the committee believes it advisable not to issue program announcements and invite applications, but, instead, to ask interested professors to register with the committee. The register will be consulted for qualified candidates for lectureships under the Smith-Mundt Act, and also for lectureships that remain unfilled in the exchange program under the Fulbright Act after the review of applications submitted in the open competition.

Persons wishing to register must be citizens of the United States. In general they will be expected to have had at least 1 year of college or university teaching experience in the United States or abroad. The committee invites correspondence from professors interested in lecturing abroad, either in the immediate or indeterminate future. For information write the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Ave., Washington 25, D.C.

■ The Arthritis and Rheumatism Foundation is offering the following fellowships for research in the basic sciences related to arthritis: (i) predoctoral fellowships ranging from \$1500 to \$3000 per annum, depending on the family responsibilities of the fellow, tenable for 1 year with prospect of renewal; (ii) postdoctoral fellowships ranging from \$4000 to \$6000 per annum, depending on family responsibilities, tenable for 1 year with prospect of renewal; (iii) senior fellowships for more experienced investigators that will carry an award of \$6000 to \$7500 per annum and are tenable for 5 years.

*The deadline for applications is 15 Oct.* For information, address the Medical Director, Arthritis and Rheumatism Foundation, 23 W. 45 St., New York 36.

■ Acting for the American Cancer Society, the Committee on Growth of the National Academy of Sciences—Research Council is accepting applications for grants-in-aid for cancer research in the United States. Applications received *before 1 Oct.* will be considered during the winter; grants that are recommended will become effective on 1 July 1956. Investigators now receiving support will be notified regarding application for renewal.

The committee feels that an understanding of cancer depends upon a deeper insight into the nature of the growth process, normal and malignant. Therefore, the scope of the research program is broad and includes, in addition to clinical investigations on cancer, fundamental studies in the fields of cellular physiology, morphogenesis, genetics, virology, biochemistry, metabolism, nutrition, cytochemistry, physics, radiobiology, chemotherapy, endocrinology, and carcinogenesis. The committee is particularly interested in encouraging research in the epidemiology of cancer. Application blanks may be obtained from the Executive Secretary, Committee on Growth, National Research Council, 2101 Constitution Ave. NW, Washington 25, D.C.

### In the Laboratories

■ A comprehensive program of scientific research designed to develop improved processing methods and to create new uses for cattle hides has been launched by the American Meat Institute Foundation, Chicago, Ill. Financing, which has been arranged at the rate of \$25,000 per year for a 3-year period, has been underwritten through special contributions by beef processing establishments located in all parts of the United States. The new research program has been established to combat the increasingly serious loss of markets for hides and skins to competitive products.

■ The Ramo-Wooldridge Corp., Los Angeles, Calif., has announced the establishment of a new division, the Aeronautics Research Laboratory, that will be devoted to advanced studies and projects in aerodynamics and related fields. Milton U. Clauser is to be director of the laboratory, but he will continue his duties in the company's guided missile research division.

■ On 29 July Chas. E. Oakes, president of Pennsylvania Power and Light Co., informed the Atomic Energy Commission of the company's decision to build a privately financed atomic-electric power plant of at least 150,000 kw. The plant will utilize a homogeneous-type reactor, on the basis that such a plant

will be commercially competitive with generating stations using conventional fuels. The new facility is expected to be operating by 1962.

A contract has been entered into with Westinghouse Electric Corp. as codeveloper with PP&L in the design and as supplier for the reactor and its related electric generating equipment. The joint program will be known as the Pennsylvania Advanced Reactor Project (PAR Project).

■ Chemsearch, New Rochelle, N.Y., a new mail service for supplying information about sources of organic chemicals, has been organized by L. E. Mackay and E. A. Falco, formerly of Wellcome Research Laboratories.

### Miscellaneous

■ *Biological Abstracts* has announced publication of *Biological Sciences, Serial Publications, a World List 1950-1954*. This is the fourth bibliography compiled by the Science Division of the Library of Congress. The titles of these publications, which are designed to keep scientists informed of the world literature in their field, are (i) *Scientific and Technical Serial Publications, United States 1950-1953*; (ii) *Scientific and Technical Serial Publications, Soviet Union 1945-1953*; and (iii) *Chinese Scientific and Technical Serial Publications in the Collections of the Library of Congress*. All but the Chinese bibliography, which was a separate Science Division project, have been sponsored by the National Science Foundation. Unlike the earlier works, which deal with publications from the various scientific disciplines on a geographic basis, the present volume is prepared on a subject basis: it includes biological serials, wherever published.

The period covered by this compilation begins with Jan. 1950 and ends with Dec. 1954, except where more recent bibliographic information has made possible the inclusion of a few 1955 titles. The text consists of about 3500 titles, grouped under the broad headings of general biology; botany; zoology; science of man; and general science. (The last category contains serials that contribute significant numbers of biological papers.)

Except in those rare instances when a serial was not available for examination, under each title is listed the issuing agency and/or publisher; the city and country of publication; the date of first issue; and the frequency of most recent issues. Bibliographic notes include (i) description of publications whose nature is not revealed by title or frequency (i.e., monographic series, collected reprints); (ii) language of text or summaries, or both, when they differ from the title; and

(iii) data such as title changes, mergers, or any interruption of publication. Lastly, the contents, or types of material making up the regular features of a publication, are described briefly.

Following the text is what is believed to be a very useful feature, an "Index of Titles, Societies and Institutions," arranged by country of origin and publication. This index is coded to indicate, also, those serials that appear in the May 1955 list of publications serving as source material for *Biological Abstracts*. The volume concludes with a subject index.

*Biological Abstracts* is so deeply convinced of the need of biologists and of all those concerned with the literature of biology for a world list of biological serials that it has undertaken the publication and distribution of this work. At a cost of \$2 each, copies may be obtained from *Biological Abstracts*, University of Pennsylvania, 3815 Walnut St., Philadelphia 4, Pa.

■ The estimates of requirements for rhesus monkeys for medical and biological purposes, submitted in response to the Public Health Service survey of needs, was completed on 5 June 1955. Further action has been delayed pending negotiations by the State Department with the Government of India. It is now reported that the United States Mission to India and the United States Embassy in India have secured the agreement of the Government of India to permit exportation of rhesus monkeys for the period ending 30 June 1956, under certain conditions.

All needs must be certified by the United States Government through the Public Health Service. Information concerning Public Health Service procedure and Certificate of Need forms may be secured from National Institutes of Health, Room 1012, Building T-6, Bethesda 14, Md.

■ On 1 July the Bureau of Ordnance, Department of the Navy, Washington 25, D.C., published an 88-page list of current vacancies in the bureau and in its field stations. Many of the employment opportunities described are for engineers, physicists, and mathematicians.

■ A 500-volume ecology and entomology library owned by the late G. M. Bentley has just been purchased by the Oak Ridge National Laboratory Libraries Division for use in the Health Physics Division library. Bentley, state entomologist and plant pathologist, was professor of entomology at the University of Tennessee before his death last year. The library also contains some 1600 reprints that were the collection of E. A. Pennoe, one of the country's earliest teachers of entomology.