

make collections each year, and only 23 percent have any type of science club. The survey indicated that overcrowded facilities and overcrowded schedules cause some neglect of time-consuming activities such as field trips, class projects, and science clubs. It also indicated that some teachers have not received adequate training in making collecting equipment, handling aquaria, conducting field trips in urban areas, rearing insects, and selecting keys suitable for high-school use. It is expected that this information will prove useful in revising entomology courses offered to prospective teachers.—SHIRLEY TOUSCH, *Department of Entomology, Michigan State University, East Lansing.*

■ The Atomic Energy Commission, and the National Science Foundation, have jointly announced the establishment of a second Summer Institute on Nuclear Engineering for engineering college faculty members. The institute is at the Brookhaven National Laboratory and is under the joint sponsorship of NSF, the AEC, and the American Society for Engineering Education. Thirty students from 22 institutions are enrolled in the 2-month course, which was established to accommodate applicants who could not be admitted to the first institute because of space limitations. The first institute is being conducted by the Argonne National Laboratory School of Nuclear Science and Engineering; 60 faculty members from 36 colleges and universities are participants.

The National Science Foundation has made funds available to pay stipends to those attending these institutes and to defray travel expenses. The funds for those attending the Argonne National Laboratory institute will be administered by Northwestern University, and the funds for those attending the BNL institute will be administered by Associated Universities, Inc. No tuition will be charged.

■ Last month Sen. Herbert H. Lehman urged the U.S. Department of Agriculture to consider a site near Cornell University for a new animal disease laboratory. The suggestion was made in a letter from Lehman to the Secretary of Agriculture.

■ Progress is being made in the organization of the U.S. Army Mathematics Research Center that is being established at the University of Wisconsin. R. E. Langer of the university's mathematics department has been appointed director of the center; a contract for its operation was recently negotiated between the university and the Army; and an Army steering group has been named that is headed by Col. Paul N. Gillon, commanding officer of the Office of Ordnance Research.

The center is expected to operate at an annual cost of approximately \$800,000. At present its offices are located within the university's mathematics department; however, ultimately it will occupy a major part of a new building.

The permanent staff of the center will be kept small. It will be supplemented by a gradually rotating corps of scientists from Army facilities and from academic institutions who will visit the center for varying periods of time.

■ Bryn Mawr College has received a gift of \$25,000 from the Radio Corporation of America in recognition of its work "in providing advanced training for women in the physical sciences." This is the largest single donation Bryn Mawr has ever received from industry. The gift will be added to a fund for the construction of the new Science Center, which will be devoted to advanced training in chemistry, physics, and mathematics, as well as in biology and geology.

■ The Western Technical Writing Institute, specifically organized to teach engineers how to write, is being established at 465 E. Union St. in Pasadena, Calif. In addition to offering courses in technical writing and editing, the institute will conduct research in technical communication techniques. Faith Kildare, teacher and author of *Fundamentals of Professional Writing*, will direct the institute with the aid of an advisory board of industrial editors and technical writing directors.

### In the Laboratories

■ A temporary laboratory has been leased in San Diego by the Convair Division of the General Dynamics Corporation to implement the company's new basic research program. Six of the 25 to 30 scientists who ultimately will comprise the staff, already are on the job.

The temporary laboratory is being equipped for explorations in gas dynamics, aerodynamics, theoretical and experimental physics, physical chemistry, mathematics, and metallurgy. It will consist of a main laboratory of 1200 square feet; a 200-square-foot chemical laboratory, an instrument shop, and six offices, including those of the director of scientific research, Charles L. Critchfield, and his assistant, W. H. Dorrance. The laboratory will be permanently housed in Convair's new \$40-million Atlas intercontinental ballistic missile facility near Montgomery Field by the last quarter of 1957.

■ A revised stable isotopes inventory and price list is available from Oak Ridge National Laboratory, which the Union

Carbide and Carbon Corporation operates for the U.S. Atomic Energy Commission at Oak Ridge, Tenn. Changes in this catalog were made in accordance with the new distribution policy set forth by the AEC earlier this year.

Under the old distribution policy, electromagnetically enriched isotopes were only lent to users in the United States. Although this loan procedure limited their uses, it provided isotopes at very reasonable cost to the user. Also, many of the isotopes were returned to stock after expiration of the loan period and could be made available to new users. Because it would be impractical to lend isotopes to certain foreign users, a limited sales policy has been in effect for the past 2 years.

The revised procedures provide for the outright sale of many enriched stable isotopes to all domestic users, as well as to certain foreign users, and permits the loan of samples of rare and expensive items under certain conditions. Moreover, neither domestic nor foreign applicants will be required to file and obtain AEC approval before purchasing the materials.

■ San Diego, Calif., has given a tract of land on the city's northern limits to the General Atomic Division of General Dynamics Corporation for the construction of a nuclear research laboratory. In accepting the gift, John J. Hopkins, president of General Dynamics, expressed gratitude to the citizens of San Diego for their "approval of our proposal to found here a Laboratory for Pure and Applied Science, and for the most generous offer of the land on which to build it. It is our hope that the new General Atomic Laboratory will not be concerned with last year's atomic products or with yesterday's atomic technology. Rather we are dedicated to the development of completely new products, to the pursuit of completely new thoughts, to the establishment of completely new technologies. . . ."

■ The new research reactor at Armour Research Foundation of Illinois Institute of Technology has gone into operation. This is the nation's first private nuclear reactor for industrial research. It will enable industry to conduct reactor studies without security restrictions and military competition.

Built by Atomics International, a division of North American Aviation, Inc., the machine is housed in a new \$1.25-million Physics and Electrical Engineering Research Building. It is not intended for the generation of electrical power, nor for research on reactors themselves. Probably its most frequent use will be in the production of radioactive samples.

The reactor is a "water boiler" type

capable of operating at a power level of 50 kilowatts. It uses fuel in the form of a water solution of uranyl sulfate—approximately one kilogram of U-235. The fuel has been obtained from the Atomic Energy Commission on “extended loan,” as required by law.

Twenty-four companies are participating in the nuclear reactor research program at Armour Research Foundation. Under the participation plan, each firm is contributing \$20,000 toward the construction and initial operation of the \$700,000 reactor facility. A.R.F. is providing the remaining funds. The companies will share in the benefits of a 3-year program whose aim is the application of atomic techniques to industrial problems.

■ The Atomic Energy Commission has announced plans for a gas-cooled power reactor experiment at the National Reactor Testing Station in Idaho. Proposals to participate in the reactor experiment project will be invited at an early date from qualified firms. The initial phase of the project calls for design of the reactor experiment.

The experiment, which is expected to cost an estimated \$4 million over a period of several years, is intended to develop engineering data and experience for design and construction of military package power reactors and small civilian central station power plants.

The gas-cooled reactor is the eighth type chosen by the commission for research and development work in the program to achieve economic reactor power systems for civilian application as well as for possible military applications. The reactor experiment project will be administered by the AEC's Chicago Operations Office.

■ A Du Pont Company survey shows that one of every seven of its employees is a college graduate. The number nearly doubled in 8 years—to 14,000—while the total of employees went up about 15 percent to approximately 100,000, including those at government-owned plants operated by the company. In 1947 about one employee in 10 had a college degree. In the same period the company's total of wages and salaries went up 85 percent—to \$491 million last year.

■ The Raytheon Manufacturing Company has purchased a 15-acre site in Goleta, Calif., 5 miles west of Santa Barbara, for a new engineering laboratory to be used in the design and development of airborne electronics and infrared equipment. Raytheon already has a few employees working in temporary space in Santa Barbara. The company plans to transfer 40 to 50 additional employees during July from its Chicago equipment

laboratory, which will be discontinued after the transfer is completed. Eventually the engineering group is expected to total approximately 125.

### Miscellaneous

■ Private firms interested in the peaceful development of atomic energy face an “almost incomprehensible maze” of state laws and regulations that may impede their activity. This is one of the major conclusions of *State Regulations of Atomic Energy*, first published section of an analysis of atomic energy and the law that is being carried out by the University of Michigan Law School.

The volume, which is financed by the Michigan Memorial-Phoenix Project, is designed to give private enterprise a check list of the legal problems that may be encountered in atomic energy development. It also suggests how states can “bring order out of chaos” in this new field. Written by E. Blythe Stason, Samuel D. Estep, and William J. Pierce of the Michigan Law School, the book terms “confusing and overlapping jurisdictions” of state agencies interested in the health and safety aspects of atomic energy as “undoubtedly the most significant aspect of the state regulatory pattern” which may affect atomic industrial development.

■ Technion, the Israel Institute of Technology, in Haifa, has announced openings for professors in the following fields: structural engineering, hydraulic engineering, soil engineering, mechanical engineering (with special qualifications in machine design and applied thermodynamics), industrial management and production engineering, electronics, chemical engineering, aeronautical engineering, mathematics, physical chemistry, general and inorganic chemistry, and basic and industrial design. Applications with full details should be sent in duplicate to Efraim Margolin, technical director, American Society for Technion, 1000 Fifth Ave., New York 28, N.Y.

■ Copies of the report by the Engineers Joint Council entitled *Professional Standards and Employment Conditions* are available without charge from Engineers Joint Council, 29 W. 39 St., New York 18, N.Y. In a statement accompanying the report, Thomas H. Chilton, president of the council, says:

“The report represents the labors of many thoughtful people who have considered and discussed the problems of engineers as employees. . . . It is, therefore, not the work or view of any one individual. . . . Important responsibilities of the professional engineer, employers of engineers, engineering societies, and

engineering educators are identified in the report. Each of us as professional engineers, and all others directly or indirectly associated with the profession, must strive diligently to establish a clear understanding of employment conditions necessary to meet professional employee expectations. An employment environment which encourages full professional and technical development of employed engineers is essential to the advancement of the profession, and the realization of their fullest contribution to the economy.”

■ In commemoration of the 50th anniversary of the passage of the 1906 Pure Food and Drugs Act, the library of the New York Academy of Medicine has prepared an exhibit of books, pamphlets, and periodicals on the adulteration of food and drugs in the United States and on legislative measures to protect the consumer. A section is devoted to Harvey W. Wiley, founder of the 1906 Act. The exhibit will be shown at the academy from 12 June until 1 Oct.

■ The National Multiple Sclerosis Society has announced that for the first time abstracts of the world's current literature on demyelinating diseases will be available in English to scientists here and abroad. This service is made possible by an initial grant of \$15,000 by the National Society to the Excerpta Medica Foundation, Amsterdam, Holland. The foundation will excerpt from all current scientific and medical journals, foreign as well as American.

The results will be published in a monthly journal containing 100–150 abstracts. M. W. Woerdeman will supervise the project, while G. W. F. Edgar will direct the staff in Amsterdam. A 10-man editorial board of scientists has been appointed to oversee the work.

■ “Gyotaku—the Impression of a Fish,” an exhibition that represents a blending of science and art, is being shown at the American Museum of Natural History in New York until 4 Sept. A Gyotaku is an impression taken of an actual fish. The result is a form of decoration that can also serve as a labor-saving scientific tool. According to Francesca LaMonte, associate curator of fishes at the American Museum, the Gyotaku is more useful to ichthyologists than a photograph in investigating certain details such as scale count, which must usually be done from the actual specimen.

The prints that are on display are a selective sampling of the work of the members of Gyotaku-no-Kai (Friends of Fish Print), an organization of artists and ichthyologists that is under the leadership of Yoshio Hiyama, an ichthyologist at the University of Tokyo.