

assistance program. Then in Sept. 1954, while on a leave of absence from his post as acting vice principal of the Provincial Teachers College at Vancouver, he went on a UNESCO assignment to develop science teaching in Jordan.

Seventy-five of his "kits," with the tools and raw materials needed to make a science "laboratory" for an elementary school, are now ready for distribution to Jordanian teachers. One hundred teachers have been trained in their use in refresher courses conducted by Jordanian educators and by Grantham.

At one village near Jerusalem, pupils have started their own natural science museum by bringing in leaves, butterflies, and lizards. Outside the school, a paper weather-vane tells wind direction, and the wind's speed is measured by an anemometer consisting of four paper cups whirling on an axle. Low-cost, locally made equipment for science laboratories has also been introduced by UNESCO technical assistance missions in Thailand, Peru, and the Philippines.

Grants, Fellowships, and Awards

■ A fellowship in pediatric neurology is available at the Children's Neurology Clinic of the Cook County Hospital in Chicago, Ill. The fellowship will provide clinical training in the diagnosis and rehabilitation of children with neuromuscular handicaps. In addition, the trainee will be expected to participate in a clinical laboratory problem. The annual stipend will range from \$3000 to \$5000, depending upon the qualifications of the applicant. For further information, write to Dr. M. A. Perlstein, 4743 N. Drake Ave., Chicago 32, Ill.

■ Lederle Medical Faculty awards for 1956-57 have been announced by the Lederle Laboratories Division of American Cyanamid Co. The award program will provide financial aid for a limited period to young individuals who have demonstrated capacities both as teachers and investigators in the fields of anatomy, biochemistry, microbiology, pathology, pharmacology, and physiology. This Lederle program is also intended to assist departments in offering opportunities for development to promising individuals.

Candidates for these awards must hold faculty rank, such as instructor or assistant professor, and should be persons who plan to continue teaching and research within the disciplines named. All awards will be made directly to a designated medical school in the United States or Canada and will be specified for the use of the department for the support of the stated grantee and his academic activities.

Awards will be made for a term not exceeding 3 years. The only restriction in the case of each recipient is that the total amount, which will be awarded at a rate to be determined by the award committee, shall not exceed \$10,000 in any one year to any one grantee.

In general, three types of awards will be considered with favor: (i) an award that will bring into the department a new person who has not previously been supported either by the departmental budget or by research grants; such an award will be expected to strengthen both the teaching and research activities of the department; (ii) an award that will continue the salary of an individual previously supported on research grants when those grants have terminated; such an award will be expected to strengthen the teaching activities and to maintain the research activities of the department; (iii) an award that will supplement the salary of an individual to enable the department to retain him to perform teaching and research functions vital to the department.

There are no formal application blanks. Nominations for Lederle Medical Faculty awards should be submitted to the committee through the office of the dean of a medical school and should be endorsed by him. Only one candidate from each school will be considered in any given year. It is suggested that the most suitable candidate be selected by a faculty committee.

Nominations for awards to be activated during the academic year 1956-57 should be submitted by 31 Oct. For information address: Lederle Medical Faculty Awards, Office of the Secretary, Pearl River, N.Y.

■ The American Cancer Society has announced that its program of clinical fellowships begun in 1948 will continue through the year 1 July 1956-30 June 1957. The regulations governing this fellowship program are the same as those for 1955-56, with a single important change: a brief annual report of the fellow's activities shall be submitted to the medical and scientific director of the American Cancer Society via the executive officer of the institution in which the fellow is working. In addition, a brief statement concerning the clinical activities of each fellow shall be submitted by the chief of service.

In some instances, grants may be awarded directly to institutions in support of graded intramural training programs. Such traineeship grants may be fluid in nature.

Fellowships will be made available primarily to teaching institutions approved by the Council on Medical Education and Hospitals of the American Medical Association. Application for one

or more fellowships should be submitted by the executive officer of the applicant's institution to Dr. Brewster S. Miller, American Cancer Society, 521 W. 57 St., New York 19.

The deadline for filing is 15 Sept. No application forms are necessary, but letters of application should include (i) number of fellowships applied for, (ii) funds available to the institution from other sources for partial support of fellows, (iii) nature of specialty contemplated for the fellow's training, (iv) name of individual under whose supervision the fellow will be trained and to whom he will be directly responsible, (v) date the fellowship will commence, and (vi) thorough documentation concerning the training the fellow will receive at the institution, including facilities available—that is, tumor clinics, opportunities for diagnosis, treatment, clinical research, and so forth.

In the Laboratories

■ The Atomic Energy Commission has announced that projects proposed by the Detroit Edison Co. and Associates and by the Nuclear Power Group led by Commonwealth Edison Co. of Chicago give promise of significantly advancing power reactor technology and providing an acceptable basis for negotiation under the Power Demonstration Reactor Program (PDR). Accordingly, the commission has authorized negotiations with the two groups.

Detroit Edison and Associates propose construction and operation of a fast-breeder reactor plant with 100,000-kilowatt capacity to be completed in late 1959. The plant is to be located within the Detroit Edison's service area.

The Nuclear Power Group's proposal, which needs only to satisfy requirements applicable to AEC licenses in order that the project may proceed, is for a boiling-water reactor plant of 180,000-kilowatt capacity to be completed in 1960. The planned location is at the junction of the Kankakee and Des Plaines rivers about 44 miles southwest of Chicago. The group's license application is under consideration by the AEC.

The AEC also announced that, as submitted, the proposals of the Consumers Public Power District of Columbus, Neb., and the Yankee Atomic Electric Co. were not acceptable bases for negotiation. However, the commission has authorized discussions with both to determine whether their proposals can be changed so that negotiations can be undertaken.

The Consumers Public Power District proposes a sodium graphite reactor plant of 75,000-kilowatt capacity to be completed in 1958. The location is not yet determined. The Consumers District is

described in its proposal as "a public corporation and subdivision of the State of Nebraska" that provides electricity to 355 of the approximately 500 communities in the state. There are no private power companies in Nebraska.

The Yankee Atomic Electric Power Co. is proposing a light water-moderated and -cooled reactor plant of 100,000-kilowatt capacity to be completed in 1958. The plant probably would be located in Massachusetts on the banks of the Deerfield River in the township of Rowe, three-quarters of a mile from the Vermont border.

The commission on 7 Apr. 1955 announced that the four proposals had been received under the Power Demonstration Reactor Program. The AEC staff since has been studying and evaluating the proposals. The objective of the PDR program is to encourage wider participation in the development of nuclear power technology and to advance the time when nuclear power will become economically competitive.

In addition to the four proposals that have been received under the PDR program, the commission has under consideration an application by the Consolidated Edison Co. of New York for a license to construct and operate a pressurized water thorium-uranium converter reactor plant of 140,000-kilowatt capacity, and a proposal by the Rural Cooperative Power Association of Elk River, Minn., for a reactor plant of 22,000-kilowatt capacity. The Elk River proposal is the first received by the AEC from a rural electric cooperative.

The Consolidated Edison plant, to be built on the banks of the Hudson River at Indian Point, Buchanan, N.Y., about 24 miles north of New York, is planned for completion in 1960. The Elk River plant, to be located adjacent to the Mississippi River about 35 miles from Minneapolis, is planned for completion about 3½ years after start of construction.

■ A radioastronomy observatory was recently opened at Rao, Sweden, by Prince Bertil. Belonging to Chalmers Technological Institute of Gothenburg, the observatory has five radiotelescopes, a magnetic observatory, apparatus for measuring long-distance television signals, and other equipment.

■ Berkeley Chemical Corp., Berkeley Heights, N.J., manufacturing affiliate of Millmaster Chemical Corp., New York, is completing a new research and control laboratory. The single-story structure will contain more than 5500 square feet of usable space, of which more than half will be devoted to research and control laboratory facilities. Space has also been provided for a reference library to replace the smaller one now in use.

■ The Atomic Energy Commission has asked industrial firms interested in designing and fabricating a small nuclear reactor for testing reactor cores to submit proposals for construction. The reactor, to be built at the National Reactor Testing Station in Idaho, will be a high-pressure, water-moderated and water-cooled type. Tests of reactor cores will be conducted in the reactor under severe operating conditions as part of the commission's program for determining safe operating limits and developing reactor designs that incorporate maximum safety characteristics.

It is estimated that the cost of such a reactor will be between \$250,000 and \$500,000. Firms indicating interest in the project to the AEC's Reactor Development Division will be given an opportunity to submit proposals late in September 1955. Delivery of the completed reactor is scheduled for mid-1956.

■ A new bulletin containing a summary of the General Electric Co.'s guided missile programs during the past decade is now available from the company's special defense projects department. Designated R55AO519, the illustrated two-page bulletin outlines the objectives of each program, and presents a short review of important accomplishments. It may be obtained by writing to the company at 2900 Campbell Ave., Schenectady 6, N.Y.

■ Union Carbide Nuclear Co., a division of Union Carbide and Carbon Corp., has been formed to integrate the corporation's diverse activities in atomic energy. An objective of the new company will be to carry on large-scale research and development activities leading to increasing participation by the corporation in the industrial applications of atomic energy.

Kenneth Rush, a vice president of Union Carbide, has been appointed president of the new company and Lyman A. Bliss, Clark E. Center, and Oscar F. Holmgren have been named vice presidents. All of the new officers have been active in the corporation's atomic energy activities for many years.

Union Carbide has been active in the United States atomic energy program since its inception. The corporation was responsible for the design, engineering, and operation of the K-25 plant at Oak Ridge, Tenn., the first gaseous diffusion unit for the separation of uranium-235 from natural uranium. This plant has been in continuous operation, under Union Carbide management, ever since production started early in 1945. Union Carbide engineers have also been concerned with the process development and engineering design for all the gaseous diffusion plants and additions that have

been built since 1946, including the installation at Paducah, Ky., which the corporation also operates. Oak Ridge National Laboratory is another atomic energy installation that Union Carbide manages for the Atomic Energy Commission.

Most of the operating divisions of Union Carbide have been active in various phases of the Government's atomic energy program: the Carbide and Carbon Chemicals Co. is the division that has operated the facilities at Oak Ridge and Paducah for the AEC; the National Carbon Co. helped develop a high-purity graphite required in the construction of atomic reactors; metallurgists of the Electro Metallurgical Co. helped develop special stainless steels and other metals for use where atomic energy equipment must withstand severe operating conditions; the Bakelite Co. made important contributions in resin-processing techniques; and the Linde Air Products Co.'s research on uranium compounds and its experience in handling large volumes of gases under pressure have proved of value in atomic energy operations.

The corporation also conducted extensive surveys for the Manhattan Project to locate uranium-bearing ores. United States Vanadium Co. was one of the country's earliest producers of uranium concentrates for the Government's atomic energy plants. It has a number of uranium mines under contract in the Colorado Plateau area as well as uranium processing mills at Rifle and Uravan, Colo. These activities will be assumed by Union Carbide Nuclear Co.

■ A building designed to keep pace with the growing research tasks required in aircraft and guided missile work is being erected at an estimated cost of \$3,000,000 by the Goodyear Aircraft Corp., Akron, Ohio. The new laboratories will be the seventh in a series of buildings that Goodyear Aircraft now occupies on a 100-acre site at Akron Municipal Airport.

At present, the corporation's chief products include various types of airships, guided missiles, and components for military aircraft—including wheels and brakes, analog computers, radar and electronic devices, and plastic and fiberglass products.

New Journals

The Central African Journal of Medicine, vol. 1, No. 2, Mar. 1955. P.O. Box 2073, Salisbury, Southern Rhodesia. Bimonthly. £2 2s. per year; 7s. 6d. per issue.

Forest Science, vol. 1, No. 2, June 1955. Stephen H. Spurr, Ed. Society of American Foresters, Mills Bldg., Washington 6, D.C. Quarterly \$6 per year; \$2 per issue.