

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 $3\frac{1}{2}$ 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.

Journal of the Institution of Telecommunication Engineers, vol. 1, No. 1, Mar. 1955. The Institution, P.B. 481, New Delhi, India. Quarterly. R. 15 per year; R. 5 per issue.

The Kurume Medical Journal, vol. 1, No. 3, 1954. Kurume University School of Medicine, 67 Asahi-machi, Kurumeshi, Japan. Irregular.

Literatur-Schnelldienst, vol. 1, No. 1, Mar. 1955. Deutsches Kunststoff-Institut, Darmstadt, Germany.

Medical Abstracts, vol. 1, No. 1, Aug. 1955. James D. Barnes, Ed. 825 Western Savings Fund Bldg., Philadelphia 7, Pa. Monthly. \$12 per year (introductory price \$10).

Plant Food Review, vol. 1, No. 1, summer 1955. Combining *Plant Food Journal* and *National Fertilizer Review*. Delbert L. Rucker, Ed. National Plant Food Institute, 1700 K St., N.W., Washington 6. Quarterly.

Public Health, Social Medicine and Hygiene, Section XVII of *Excerpta Medica*, vol. 1, No. 6, June 1955. W. J. Bais, Ed. 111 Kalverstraat, Amsterdam C., Netherlands (order from Excerpta Medica Service Corp., 280 Madison Ave., New York 16). Monthly. \$16 per year.

Revista Venezolana de Síntesis, vol. 1, No. 1, July-Sept. 1954. Sociedad Venezolana de Síntesis, Apartado 2.205, Caracas, Venezuela. Quarterly. \$6 per year.

Miscellaneous

■ The Smithsonian Institution's division of medicine and public health has announced the opening of a new exhibit that pictorially traces the development of the drugstore. Sponsored by the American Institute of the History of Pharmacy, the exhibit features 12 hand-colored pictures commencing with an Islamic pharmacy of the 13th century and concluding with a modern American pharmacy. The original pictures, from which these reproductions were made, are all contemporary to the times portrayed.

The first privately owned, government-supervised shops that dealt primarily in drugs existed in Baghdad about the middle of the 8th century A.D. Pharmacies sprang up in Europe following the Islamic pattern, particularly after the 12th century. The pictures show that the pharmacies, like other medieval shops, were open to the street; a large shutter that closed off the shop at night served as a counter during the day.

The Smithsonian exhibit shows how the pharmacy became larger and more sheltered from the street by the 16th century; equipment became more elaborate and drug containers became more uniform in size and shape. The earliest

interior view of a United States drugstore shows plain glassware and fixtures, as compared with its European counterpart. Those who cooperated in the preparation of the exhibit are George Urdang, pharmaceutical historian and director of the American Institute of the History of Pharmacy, Glenn Sonneck, secretary of the pharmaceutical historical society, and George Griffenhagen, associate curator of the Smithsonian's division of medicine and public health. The exhibit is located in the Arts and Industries Building, Washington, D.C.

■ A competitive examination for appointment of medical officers to the Regular Corps of the U.S. Public Health Service will be held in various places throughout the country on 15, 16, and 17 Nov. Appointments provide opportunities for career service in clinical medicine, research, and public health. They will be made in the ranks of assistant and senior assistant, equivalent to the Navy ranks of lieutenant (j.g.) and lieutenant, respectively.

Entrance pay for an assistant surgeon with dependents is \$6017 per annum; for a senior assistant surgeon with dependents, \$6918. Provisions are made for promotions at regular intervals. Benefits include periodic pay increases, 30 days of annual leave, sick leave, medical care, disability retirement pay, retirement pay that is three-fourths of annual basic pay at time of retirement, and other privileges. Active duty as a Public Health Service officer fulfills the obligation of Selective Service.

Requirements for both ranks are U.S. citizenship and graduation from a recognized school of medicine. For the rank of assistant surgeon, at least 7 years of collegiate and professional training and appropriate experience are needed; and, for senior assistant surgeon a minimum of 10 years of training is required.

Application forms may be obtained by writing to the Chief, Division of Personnel, U. S. Public Health Service, Department of Health, Education, and Welfare, Washington 25, D.C. Completed application forms must be submitted by 15 Oct.

■ The common names of Australian insects, linked with their scientific names, are listed in Bulletin 275 of the Commonwealth Scientific and Industrial Research Organization, 314 Albert St., East Melbourne, Australia. The list, which was issued on 27 July, includes those insects and related pests that are of major economic importance, together with others selected because of their abundance or striking appearance.

This is the first official list of its kind prepared in Australia. It has been com-

piled by the C.S.I.R.O. Division of Entomology in cooperation with a committee appointed by the Brisbane (1951) meeting of the Australian and New Zealand Association for the Advancement of Science.

■ The National Registry of Rare Chemicals is conducted as a free public service by Armour Research Foundation of Illinois Institute of Technology, 55 W. 33 St., Chicago 16, Ill. Each year the registry receives approximately 2900 letters asking for information about thousands of rare chemical compounds. In addition, 10 to 15 telephone inquiries and numerous telegrams and cablegrams from all over the world are handled daily. Since it began operation in 1942, the registry has located chemicals for more than 20,000 persons.

Although it is not a storehouse of chemicals, the registry has cataloged more than 30,000 rare chemicals so that it may serve as a clearinghouse for scientists and industrialists who are seeking specific compounds that they cannot locate at regular supply houses. About 60 percent of all requests are answered from this card file. The remainder are filled from leads offered by scientists from Armour Research Foundation, universities, and other organizations, and—for particularly hard-to-find chemicals—through lists published in scientific journals. Such a list follows: 3-(octadecyloxy)-1,2-propanediol (batyl alcohol); 1,3,5-trivinyl benzene; technetium chloride; trinitrosophloroglucinol; 2-(n-butyl)pyridine; 1-octadecylpyridinium chloride; 2-methylglutamic acid; cholesteraise; 2,4-dimethyl-1-hexene; 2,4-dimethyl-2-hexene; 3,4-dimethyl-1-hexene; 3,4-dimethyl-2-hexene; 2,3,4-trimethyl-2-pentene; 3,4,4-trimethyl-1-pentene; 3,3-dichloropropene; 4,5-dimethyl-o-phenylenediamine; 2,4-diamino-5-phenylthiazole hydrobromide; 9-amino-nonanoic acid; alpha-amyrin (alpha-amyrenol); and eriochrome cyanine.

■ In February 1956 the first issue of *Survey of Ophthalmology* will appear. It will be a bimonthly that will publish one 600-page volume a year; cost is \$9. The editor will be Frank W. Newell, chief of the section of ophthalmology and associate professor of ophthalmology at the University of Chicago. He will have the active assistance of a board of about 40 ophthalmologists. A section on refraction is expected to make the *Survey* of value to optometrists.

The new journal is expected to fill a need for a publication that will select the best material from current periodical literature in ophthalmology to keep the reader up to date with progress in the field. Williams & Wilkins Co. of Baltimore, Md., will be the publishers.