

■ The Edward S. Harkness Memorial Hall was dedicated on 7 Oct. at Yale University. The 11-story building, which cost \$2.75 million, will be a residential center for 266 medical students. Donald P. Shedd, assistant professor of surgery, has been named resident faculty member.

### Grants, Fellowships, and Awards

■ During the next few months, college seniors and graduate science students throughout the United States will compete for more than 750 National Science Foundation fellowship awards for a year of graduate scientific study during the academic year 1956-57. Applications for the 1956-57 NSF fellowship program may be obtained from the Fellowship Office, National Research Council, Washington 25, D.C.

The closing dates for receipt of applications are 19 Dec. for postdoctoral applicants and 3 Jan. 1956 for graduate students working toward advanced degrees in science. The selections will be announced on 15 Mar. 1956. These fellowships are awarded to American citizens who will begin, or continue, their studies at the graduate level in the mathematical, physical, biological, medical, engineering, and other sciences during the 1956-57 academic year.

For the first time this year, the foundation will award fellowships in fields of convergence between the natural sciences and the social sciences. Approximately 20 fellowships will be awarded in such overlapping areas as mathematical economics, demography, information and communication theory, and the history and philosophy of science.

Selections will be made solely on the basis of ability. The majority of the fellowships will go to graduate students seeking master's or doctor's degrees in science, although about 80 awards will be made to postdoctoral applicants. Graduating college seniors in the sciences who desire to enter graduate school are encouraged to apply for the awards.

The rating system for selection of predoctoral fellows will be based on: (i) test scores of scientific aptitude and achievement; (ii) academic records; (iii) written evaluations of each individual from his faculty advisers and other qualified observers. Postdoctoral applicants will not be required to take the examinations. Applicants will be rated by special fellowship panels established by the National Research Council. Final selection will be made by the National Science Foundation.

Stipends vary with the academic status of the fellows. First-year fellows—students entering graduate school for the

first time or those who have had less than 1 year of graduate study—will receive annual stipends of \$1400. Fellows who need one final academic year of training for the doctor's degree will receive annual stipends of \$1800. Fellows between these groups will receive stipends at the rate of \$1600 annually. The stipends for postdoctoral Fellows will be \$3400 per year. Dependency allowances will be made to all married fellows. Tuition and laboratory fees and limited travel allowances will also be provided. Fellows may attend any accredited non-profit institution of higher education in the United States or similar institutions abroad.

In 1952-53, the first year of the foundation's fellowship program, 624 candidates were chosen from approximately 3000 applicants. Last year 785 selections were made out of 3389 applicants, and about 1400 persons were named on an honorable mention list, which was made available to deans of graduate schools.

■ Two new fellowships have been established at Johns Hopkins University. These will permit staff members of the Hopkins Applied Physics Laboratory in Silver Spring, Md., to spend a year in one of the university's Baltimore divisions.

Those selected will be appointed William S. Parsons fellows; the fellowships are named in memory of a naval officer and scientist "who, through his understanding and encouragement of new technological advances made a lasting contribution to the military preparedness of this country and to the program of the Applied Physics Laboratory."

■ As one phase of its continuing aid to education, the Ethyl Corporation has announced the award of 19 graduate research fellowships in chemistry, chemical engineering, and mechanical engineering for the 1955-56 academic year. Total value of the awards is approximately \$45,000.

Each fellowship provides the recipient with \$1500 for living expenses and an allowance for tuition and fees. In addition, the college department concerned receives \$500 for expenses in connection with the fellow's research work. The corporation has awarded fellowships at colleges and universities throughout the country annually since 1937.

■ The Division of Medical Sciences, National Academy of Sciences-National Research Council, 2101 Constitution Ave., Washington 25, D.C., is accepting applications for grants-in-aid of research in three specialized fields:

The Committee on Problems of Alcohol has available a limited fund for the support of grants. The committee is in-

terested in fostering research, primarily on the physiological, biochemical, and pharmacological effects of alcohol. Applications for the fiscal year 1956-57 should be postmarked *not later than 15 Jan. 1956*.

The Committee for Research in Problems of Sex is concerned with encouraging research, primarily on the mechanisms controlling sexual behavior in animals and man. Proposals involving endocrinological, neurological, psychological, anthropological, phylogenetic, and genetic studies directed toward this objective are therefore invited. Requests will also be considered that deal with the physiology of reproduction or with related biological and biochemical fields. Applications for the fiscal year 1956-57 should be postmarked *on or before 1 Feb. 1956*.

The Committee on Drug Addiction and Narcotics may have available for the coming year limited resources for the support of research in the fields of analgesia and addiction. The committee also invites information on basic research being carried on in these fields, in order that it may extend its activities as a center for the exchange of information on current investigations in this area.

■ At a recent meeting of the Ohio State University's board of trustees, 22 contracts totaling \$624,538.84 for research projects supported by Government and industry were reported. Most of the research agreements, which are administered by the Ohio State University Research Foundation, represented continuations of projects already under way.

Largest of the studies, with a contract for \$161,802 with the Air Research and Development Command, Baltimore, Md., called for further research by the department of chemistry on oxidation of hydrocarbons. Another contract, for \$92,000, continued studies in the department of psychology on "human engineering of air traffic control systems" for the Wright Air Development Center, Wright-Patterson Air Force Base, Dayton, Ohio.

■ The Chaim Weizmann memorial fellowships have been announced. These are tenable at the Weizmann Institute of Science, Rehovoth, Israel. The work of the institute is chiefly devoted to fundamental research in the exact sciences. Awards will be made to scientists who have done meritorious postdoctoral research.

The stipend, including fare, for an unmarried fellow coming from Europe will be \$3500 (\$4000 from the United States or Far East). The stipend, including fare, for a married fellow bringing his family from Europe will be

\$4500 (\$5500 from the U.S. or Far East). It should be noted that the cost of living in Israel, measured in dollars, is considerably lower than that of the United States.

Applications will be accepted *until 15 Dec.* Further information may be obtained from the Academic Secretary, Weizmann Institute of Science, Rehovoth, Israel.

### In the Laboratories

■ The Navy has completed a \$41-million engine test laboratory in Trenton, N.J. The facility includes steel and concrete test cells—two altitude chambers, two jet engine sea-level test cells, and an altitude cell for turbo-prop engines.

The ram blower rigs can force more than a million cubic feet of air a minute past engines in the test cells; the heating systems are designed to simulate aerodynamic heating—the friction heat barrier that faces aircraft making sustained flights at supersonic speeds. The cooling systems can refrigerate air to  $-67^{\circ}\text{F}$ .

The equipment that has been installed can be used to simulate any desired variation of atmospheric temperature, density, and humidity encountered by aircraft from sea level to an altitude of 65,000 feet, at speeds far beyond that of sound.

A remotely operated electronic control system has a 35-foot graphic supervisory control panel, interlinked with 11 locally placed control panels, as its nerve center. More than 60 automatic instruments—level indicators, alarms, recorders, controllers, and indicators—register results of the engine tests. On one instrument the operator can dial any one of 300 different temperatures, ranging from  $-200^{\circ}$  to more than  $+1200^{\circ}\text{F}$ . More than 26 miles of thermocouple wire and 23 miles of copper tubing link test cells and electronic control boards.

David E. Dressendorfer of Springfield, Ill., laboratory superintendent, said that the new facilities will handle the bulk of the Navy's test and evaluation work on current and future jet and turbo-prop engines.

■ The Dow Corning Corporation of Midland, Mich., has been named winner of the 1955 award for chemical engineering achievement, given biennially for outstanding contribution to the chemical engineering field by *Chemical Engineering*, the McGraw-Hill publication that sponsors the award.

Walter G. Whitman of Massachusetts Institute of Technology, chairman of the award committee, will present the award at a dinner to be given on 7 Dec. in connection with the 25th biennial Exposition of the Chemical Industries at the Belle-

vue-Stratford Hotel, Philadelphia, Pa. Dow-Corning is being recognized for large-scale production and marketing of silicones, which were first produced by the company for military use during World War II.

■ International Business Machines Corporation has announced plans to establish a research and development laboratory in Zurich, Switzerland. It is expected to be in operation by the first of next year. The new laboratory will make possible closer contact between the domestic IBM organization and development activities being conducted by European scientists and engineers in the accounting and data-processing equipment field. Ambros P. Speiser, associate professor at the Swiss Federal Institute of Technology, has been appointed director of the laboratory. He will assume his new position after he completes his present work as head of the computer group at the institute.

■ A British proposal to build a \$230-million steel plant in India has been accepted by the Indian Government as part of its plan to increase national steel production to 6 million tons a year. The plant, which will have an annual capacity of 1 million tons, will be India's third such government-owned undertaking. The Indian Government has previously contracted for Soviet- and German-built plants.

■ Murray E. Volk, who was formerly associated with Nuclear-Chicago, recently announced the organization of the Volk Radiochemical Company with offices and laboratories at 5412 North Clark St., Chicago, Ill. The new company will specialize in the manufacture and supply of compounds tagged with radioactive carbon, phosphorus, and sulfur.

■ The Du Pont Company will build a new sulfuric acid plant on a recently acquired site in Ohio near the confluence of the Ohio and Greater Miami rivers about 20 miles from Cincinnati. Construction is to start immediately and the plant is scheduled to open in the latter part of 1956.

To be known as the Fort Hill Works, the new unit will be operated by the company's Grasselli Chemicals Department. It will replace the plant now operated by Grasselli at Lockland, near Cincinnati.

### Miscellaneous

■ Electronics specialists are urgently needed at the Corps of Engineers Research and Development Laboratories, Fort Belvoir, Va., to conduct basic and applied research on new devices for

military use. The ERDL occupies a 240-acre wooded peninsula about 15 miles south of Washington, D.C. The electronics laboratory is devoted to the development of mine detectors and related equipment. Engineers working at ERDL have the opportunity of pursuing graduate studies at Government expense at Catholic University of America.

Applicants must hold a degree in electrical engineering, physics or mathematics, or have considerable practical research experience in their fields. Salaries range from \$4345 to \$8940 per year. Those interested should apply to Mr. Walter H. Spinks, Acting Executive Officer, Engineer Research and Development Laboratories, Fort Belvoir, Va.

■ A map showing known uranium deposits of the United States has been prepared by the Geological Survey on behalf of the U.S. Atomic Energy Commission. Studies in recent years have shown that although trace amounts of uranium occur nearly everywhere under extremely varied geologic conditions, concentrations large enough to warrant mining are restricted.

The principal uranium deposits in the United States are located in sandstone of the Colorado Plateau in Arizona, New Mexico, Colorado, and Utah, as well as in limestone in New Mexico. Important deposits in sandstone are also found in South Dakota and Wyoming.

The locations of the uranium deposits shown were established with the help of information gained from published and unpublished reports of the Atomic Energy Commission, its contractors, and the Geological Survey. Included are discoveries by private individuals, corporations, and Government agencies.

Published as MR 2 of the Survey's Mineral Investigations Resource Studies, the 34- by 52-inch map was compiled by R. W. Schnabel, Survey geologist. Copies may be ordered by mail at 50 cents each from the Geological Survey Distribution Center, Washington 25, D.C., and Federal Center, Denver 2, Colo.

*Erratum:* In the 21st line of the fifth paragraph of the article "Genetic damage produced by radiation," by H. J. Muller, in the issue of 17 June, page 837, the word *not* was inadvertently omitted. The sentence should have read: "This is why the group of responsible scientists who signed the official report on these investigations in Japan (4) stated that it had 'always been doubtful whether significant findings' could be obtained by the methods there used and pointed out that the inconclusive results, although *not* definitely positive, were at the same time 'entirely consistent with what is known of the radiation genetics of a wide variety of [other] material.'"

*Erratum:* In the article "Recent Geology of Cane Wash, Monument Valley, Arizona," by Charles B. Hunt, in the issue of 30 September, page 584, a line of type was unfortunately misplaced at the last moment. The next to the last sentence in the third column should read: "Upstream from the lake beds (Fig. 2) Cane Wash is aggrading the valley floor."