

■ A 3-year research and training program in water resources development, supported by a grant of \$150,000 from the Rockefeller Foundation, will be in full operation next September at the Harvard Graduate School of Public Administration.

The purpose of the program is twofold: to study the water resources problems of today from the viewpoints of the engineer, the economist, and the political scientist; and to train each year 10 government officials from agencies that are concerned with conservation and related problems. The fellows will be awarded the degree of Master of Public Administration.

Arthur A. Maass, who will lead a weekly seminar, gives this description of the program and the problems that gave rise to it:

"Rising population, booming industrial and economic activity, growing cities—all impose new and heavy demands on our water resources. The economic and social consequences of such old problems as floods and drought have become intensified. New problems, such as pollution by industrial wastes, have arisen.

"There have been many important studies of water resources policy and administration, but the problems have not been eliminated. Serious inconsistencies of approach have obscured the basic problems. They have worked against the development of a unified planning process through which various agencies could integrate plans for a specific area.

"In the university, without constant tensions and pressures for action, we can work toward such an approach. We can also fill a particular need in water resources planning and development today—the need for fundamental research bringing together the knowledge and research of both the social and the applied scientist."

■ A gift of \$2 million by Frank Jay Gould will help complete the engineering and science center at the University Heights campus of New York University.

The sum will cover half the cost of a new building that is to contain education and research facilities for physics; chemical, electrical, mechanical, and industrial engineering; meteorology and oceanography; and a science and engineering library.

■ Cornell University will offer a course in techniques and applications of the electron microscope from 11 to 23 June. Further information may be obtained from Prof. Bernard M. Siegel, Department of Engineering Physics, Rockefeller Hall, Cornell University, Ithaca, N.Y.

■ Occupation of the new administration and laboratory building of the University of California's Los Alamos Scientific Laboratory began late in January. When the entire transfer is completed, the 560 offices in the building will be occupied by nearly 1000 members of the laboratory staff.

The new structure is situated in the laboratory's technical area across Los Alamos Canyon on South Mesa. Here also are located the new physics building, chemistry and metallurgy building, shops building, and other new facilities. Except for a few of the old, temporary, wartime structures still remaining on Los Alamos Mesa, the laboratory has approached the completion of its 5-year program of shifting its facilities and personnel to the technical area so that it will be completely divorced from the community of Los Alamos.

■ A graduate educational program in the biological sciences basic to medicine will open in September at the State University of New York's Medical Center in Brooklyn. The new curriculum, which will admit candidates for the Ph.D. degree, initially will offer programs in anatomy, biochemistry, pharmacology, and physiology. Requests for information and applications should be addressed to State University of New York College of Medicine, 462 Clarkson Ave., Brooklyn.

Grants, Fellowships, and Awards

■ The American Chemical Society has established the James T. Grady award to honor the person who makes "an important presentation through an appropriate medium of public communication for increasing the knowledge and understanding by the American public of chemical progress [*Science* 122, 117 (1955)]. Fields that may be included are press, radio, television, films, the lecture platform, books, pamphlets, or any other field deemed pertinent."

This award will first be made in 1957, and the *closing date for nomination is 1 June*. The award consists of a gold medal, a certificate, and an allowance of \$150 to travel to the ACS meeting where the award is presented.

Bob Potter, Chemical Society of the County of New York, 2 E. 103 St., New York 29, N.Y., has been appointed chairman of the Canvassing Committee for this award. Each nomination must be submitted by a member of the ACS.

■ Climax Molybdenum Company will sponsor grants-in-aid at 15 universities and two independent research foundations for agricultural and biological research on molybdenum during 1956-57.

These grants totaled \$36,000. This is an increase over the 17 grants, totaling \$26,500, that were made last year.

This program of sponsored agricultural research was inaugurated in 1950 when the problem of molybdenum-deficient soils in this country first became apparent. At that time, it was known that molybdenum was essential to plant growth, and that commercial use of molybdenum to promote crop yield was widespread in Australia and New Zealand. But the existence of extensive molybdenum-deficient soils in the United States was unsuspected, and treatment of different crops with molybdenum chemicals had rarely been tried here.

About 35 molybdenum-deficient areas have been located in some 20 states, and new ones are being reported regularly. Some dozen crops are being treated commercially with molybdenum chemicals in various sections of the country. Research findings have established the need for molybdenum in nitrogen fixation in legumes and in the enzyme systems that control protein synthesis by plants.

■ The University of Georgia Ecological Studies directed by Eugene P. Odum at the Savannah River Plant of the U.S. Atomic Energy Commission are entering a second phase of development. Following several years of rather broad studies of the basic environment and major populations on the 200,000-acre plant reservation, specific experimental research is planned to help provide a sound basis for solving the ecological problems of radioactive waste disposal. Research assistantships are available for Ph.D. candidates who desire training in radiation ecology, a new field that is expected to become important in the future. Address inquiries to Dr. E. P. Odum, Department of Zoology, University of Georgia, Athens.

■ Eleven grants totaling \$491,328 from the U.S. Public Health Service, will enable hospitals, health agencies, and community groups to conduct research and demonstrations for the improvement of hospital services. The funds were made available by the Congress under the Hospital Survey and Construction Act. The awards, approved by the Federal Hospital Council at a meeting on 1 March, go to the following:

Beth Israel Hospital, Boston, Mass., to develop methods of evaluating a hospital's outpatient service.

Connecticut Hospital Association, New Haven, to demonstrate the value of supplying member hospitals with the continuous service of consultants in the fields of personnel and dietary administration.

Catholic Hospital Association of the United States and Canada, St. Louis,

Mo., to develop a nontechnical manual of specific guides to help hospital administrators use accounting techniques in planning and controlling various phases of hospital operations.

American Hospital Association, Chicago, for a study of medical records systems to find out which system of coding and indexing provides the greatest number of useful records most easily and economically.

Hospital Council of Philadelphia, for a study to determine to what extent hospitals are making private offices available to doctors and the advantages and disadvantages of these arrangements.

United Hospital Fund of New York, for an analytic study of management improvement programs in hospitals and a demonstration to show how hospital organizations can help hospitals start these programs and carry them on effectively.

Georgia Department of Public Health, Atlanta, for an educational demonstration in small hospitals to train dietary supervisors who are not graduate dietitians.

Community Studies, Inc., Kansas City, Mo., for a master plan for the coordination of a base hospital center with the health and medical resources in the entire area served by the base hospital.

United Community Services of Metropolitan Boston, for a demonstration to show how the hospital and health services of a single city and its suburbs can be coordinated and a program developed to increase the quality and availability of medical care.

University of Texas, Austin, for a comparative study of two types of communities and their hospital services, to find the relationship between the social organization of a community and the success of its general hospital.

American Association of Medical Record Librarians, Chicago, to develop standards and procedures for keeping and using medical records in chronic disease hospitals.

In the Laboratories

■ Organization of a firm for general consultation on all aspects of air pollution has been announced by Wesley C. L. Hemeon, presently engineering director of the Industrial Hygiene Foundation and senior fellow of the Mellon Institute. Hemeon will be director of the new firm, which is to be known as Hemeon Associates. Headquarters offices and laboratory will be in the Leoffler Building at 121 Meyran Avenue, Pittsburgh, Pa.

Heading a staff of specialists in various aspects of air pollution will be George F. Haines, Jr. The staff will be supplemented by a team of consulting asso-

ciates that will completely embrace the several fields of chemistry, engineering, meteorology, plant physiology and pathology, and wind tunnel aerodynamics.

■ The U.S. Atomic Energy Commission has announced that it will add ordnance engineering to its weapons development activities in Livermore, Calif. The new function will be carried out by the Sandia Corporation, Albuquerque, N.M.

Sandia plans to increase its staff in Livermore to about 250 by July 1957, and to 800 to 1000 by July 1958. Most of those added will be engineers and draftsmen.

■ Formation of a nucleonics research section in the research department of Stromberg-Carlson, a division of the General Dynamics Corporation, has been announced. The section will be headed by Robert L. Deming, who joined Stromberg-Carlson recently after having served for more than 4 years as a research staff member at the Los Alamos Scientific Laboratory, Los Alamos, N.M. Matthew P. Tubinis and Thomas T. Thwaites, both physicists, will assist Deming.

■ A research section for metallurgical problems in the atomic energy field, the reactor metallurgy section, has been established at Armour Research Foundation of Illinois Institute of Technology. Donald J. McPherson, assistant manager of the metals research department, will be acting supervisor of the section, and Ray J. Van Thyne has been named assistant supervisor.

■ The Radio Corporation of America has announced plans for the establishment of an Advanced Development Laboratory in the New England Industrial Center at Needham, Mass. A one-story brick building, comprising 20,000 square feet, has been leased and will be occupied this month.

The new plant will be utilized for advanced developmental work on ferrites under the direction of Francis E. Vinal. Ferrites are inorganic chemical compounds formed from metallic oxides and are widely used in components for television receivers, computers, and in high-frequency applications.

■ A new technique for manufacturing transistors has been announced by Texas Instruments, Inc., Dallas. The new "grown-diffused" technique works with both germanium and silicon. The resulting commercially available kernel-sized production transistors amplify electric signals at usable power levels to frequencies of more than 100 megacycles per second and will oscillate at frequencies of more than 250 megacycles per second.

Miscellaneous

■ The United States Civil Service Commission has announced an examination for filling geophysicist positions in the Coast and Geodetic Survey of the Department of Commerce, in other Federal agencies in Washington, D.C., and throughout the United States. A few positions may also be filled overseas. The salaries range from \$4345 to \$11,610 a year.

For positions paying from \$4345 to \$5440 a year, education alone may be qualifying. No written test is required.

Further information and application forms may be obtained at many post offices throughout the country, or from the U. S. Civil Service Commission, Washington 25, D.C. Applications will be accepted by the Board of U.S. Civil Service Examiners, Coast and Geodetic Survey, Department of Commerce, Washington 25, D.C., until further notice.

■ The British Information Services have announced the availability of a 17-minute film that illustrates the development of the rocket from a Chinese firecracker, through various 17 century inspirations for space travel, to its applications of today. The film shows activities at three rocket research establishments in Britain that have never before been shown to the public.

Pictures of rocket-firing aircraft strafing enemy shipping and supplies, and of the V-2 weapon at Peenemunde, the secret German rocket base, emphasize the part played by rockets in World War II. Some photographs of the American coastline and the Gulf of Mexico taken from a V-2 90 miles up are included.

The film also shows some American post-war experiments in rocket development and discusses the future that may lie ahead in this important field. The two 16mm black and white reels may be rented for \$3.50 from the British Information Services, 30 Rockefeller Plaza, New York 20.

■ A collection of 230,000 specimens of termites, including 1286 species of the approximately 2000 known in the world, has been presented to the Smithsonian Institution by the U.S. Department of Agriculture Forest Insect Research. Thomas E. Snyder, retired USDA entomologist, has been making the collection for 46 years.

Among the specimens are 943 type specimens—that is, individuals to which all others of the species must be referred for final identification. When Snyder started his collection in 1915 there were only 12 identified species of termites in the Smithsonian collections.