

graduate study. Only 12 percent have the doctor's degree, and 62 percent stopped at the bachelor's level. Among women chemists, 26 percent have doctorates and 50 percent have no advanced degree.

Chemical engineers as a group seem to have an earnings advantage over chemists, the report indicates, but when chemists and chemical engineers hold comparable jobs they tend to receive about the same salaries. The report also showed that men chemists, throughout their careers, earn about 1½ times as much as women chemists.

Among the occupations most common among chemists and chemical engineers, the best paying is technical administration, with a median salary (disregarding experience and education) of \$856 monthly for chemists and \$898 for chemical engineers. Industrial research comes next—\$638 for chemists and \$647 for engineers. Lowest median salaries for the more prevalent occupational categories are found in college and university teaching (\$517 for chemists and \$637 for chemical engineers) and in analysis and testing (\$473 for chemists and \$520 for engineers). Of all occupations reported, secondary-school teaching paid least, with a median salary for chemists of \$443 a month. The best-paid jobs, outside technical administration, were in nontechnical administration consulting and in law.

### Search for Cancer Drugs

The U.S. Public Health Service has placed contracts with five laboratories for large-scale screening of chemical compounds in the search for drugs useful in treating cancer. The laboratories, which will begin the work at once, are Microbiological Associates, Bethesda, Md.; Wisconsin Alumni Research Foundation, Madison, Wis.; Southern Research Institute, Birmingham, Ala.; Hazleton Laboratories, Falls Church, Va.; and Stanford Research Institute, Menlo Park, Calif. Responsibility for supervising the contracts rests with the Cancer Chemotherapy National Service Center of the National Cancer Institute.

The laboratories are expected to examine approximately 2000 compounds by 1 July. Each compound will be tested against three different kinds of cancer implanted into various strains of mice under procedures for animal screening established by a panel of the Cancer Chemotherapy National Committee. This committee, representing the leading organizations and Government agencies in cancer research, was established last May to sponsor a national voluntary program of cooperative research and development in cancer chemotherapy.

### State Conservation Programs

A survey of how each state is organized to give educational leadership in conservation and use of resources is being conducted under the direction of Richard L. Weaver, associate professor of conservation in the School of Natural Resources at the University of Michigan. The work is supported by a grant from the Horace H. Rackham School of Graduate Studies. Each state agency concerned with education about resources is being asked to complete an inventory statement covering such matters as leadership, state committees, program, financing, publications, cooperation, legislation, and problems or obstacles to progress.

The results of the inventory will be used by Weaver in scheduling visits to each of the states to interview the people responsible for the programs. It is expected that the results of the study will help professional organizations and foundations in their efforts to be of greater service nationally.

### Code for Atomic Structure of Solids

A new code for describing the atomic structure of solids has been invented by A. L. G. Rees, assistant chief of the Division of Industrial Chemistry, at the Australian Commonwealth Scientific and Industrial Research Organisation. Rees described his new system of symbols on 5 Apr. at the Symposium on Crystallography that was held in Madrid, Spain. He pressed for universal adoption of the code, saying that it will enable scientists to set out their research results without ambiguity, which should lead to more rapid advances in many aspects of industrial research.

The code makes it possible to describe concisely the irregularities in the atomic structure of crystalline solids. These irregularities are of special industrial importance. They are important in photography, fluorescent lamps, TV screens, luminous watch dials, and transistors. They play an important part, too, in many processes of modern chemistry and metallurgy; for example, the catalysts that are used in the cracking of crude oil to produce gasoline depend on them for their activity.

### News Briefs

■ A new laboratory animal, *Meriones libycus*, is being introduced into this country from England, where it has been bred for the past several years for use in studies on the Cocksackie virus. The animal is a species of desert rat found in

Libya and North Africa that was originally imported into England in November 1951 by the late G. M. Findlay. He had obtained two pairs from Lapine of the Pasteur Institute in Paris.

■ The Library of Congress has agreed to prepare a continuing, annotated bibliography on air pollution for the U.S. Public Health Service. The bibliography will include references to the physical, biological, engineering, legal-administrative, and economic aspects of atmospheric pollution.

Last year, the Congress appropriated \$1,785,000 for Public Health Service support of air-pollution research and technical assistance. In December it was announced that the Bureau of Mines, the National Bureau of Standards, and the Weather Bureau, would undertake research projects in air pollution for USPHS.

■ The Geological Survey has developed a new orthophotoscope that was displayed publicly for the first time at the recent annual meetings in Washington of the American Congress on Surveying and Mapping and the American Society of Photogrammetry. The device changes conventional aerial photographs, with all their distortions from camera tilt and changes in elevation on the ground, into the equivalent of distortion-free photographs. It produces a corrected photograph that is a true map or photomap of uniform scale. This development makes it possible for the first time to measure straight-line distances accurately on an aerial photograph.

■ Assistance in establishing a nuclear physics department at the Federal University of Karachi will be provided to the Government of Pakistan by the United Nations Educational, Scientific and Cultural Organization. Frans Barendregt, chief scientist at the new Dutch Nuclear Reactor Center at The Hague, is being sent to Karachi for this purpose. He is the first nuclear scientist to go on a mission under the UNESCO program designed to serve countries in fields not covered by the United Nations technical assistance program.

■ An albacore tuna tagged 1300 miles north of Hawaii on 5 Oct. 1954 by the U.S. Fish and Wildlife Service was recaptured near Japan, 2370 miles away, 471 days later. It weighed 15 pounds when it was tagged and 40 pounds when it was recaptured.

It is thought that the albacore tuna of the North Pacific may belong to a single population that migrates between the United States and Japan. However, this is only the second time that an albacore tagged by the U.S. has been taken