

NSF Employment Profile of Scientists, 1954-55

Comprehensive information on the employment and other characteristics of American scientists is made available in a bulletin released recently by the National Science Foundation. The report, *Employment Profile of Scientists in the National Register of Scientific and Technical Personnel, 1954-55*, is based on the replies of more than 94,000 scientists who supplied information to the Register. It contains the most recent data available on so large a number of scientists, including about 27,000 chemists, 16,300 biologists, 12,200 psychologists, 11,800 geologists (including 3400 geophysicists), 11,200 physicists, 6700 chemical engineers, 5400 mathematicians, 3200 meteorologists, and 400 astronomers.

More than 41 percent of the employed scientists in the Register held the Ph.D. degree; 25 percent attained a master's degree; and 32 percent had the bachelor's or first professional degree (M.D., and so forth). Fewer than 2 percent of scientists reported no degree.

Scientists at the doctorate level in 1954-55 reported a median annual salary of \$7000, those with less than a Ph.D. degree—\$6125. Highest median salary was for Ph.D. physicists and meteorologists—\$7850. Lowest salaries were for psychologists—\$5850. Salaries are not only dependent on educational attainment, but also on such things as age, sex, type of employer, and functions to which scientists devote the major part of their time. The data on salaries is less representative than the information on other employment characteristics, however, because the chemists and chemical engineers did not report salary information.

About one-half of the employed scientists held a job in industry (private companies, self-employed, nonprofit foundations, and privately controlled research foundations). Almost one-third were employed by educational institutions; and the remaining 18 percent by the Government (federal, state, and local).

Research, development, or field exploration was the primary function of half the scientists; management or administration, of 18 percent; and teaching, of 16 percent. In this, as in other respects, basic differences among the various scientific fields appear. Teaching, for example, was reported as the major function of almost 40 percent of the mathematicians, but of only 4 percent of the chemical engineers.

About 7000 women scientists were included in the Register total of 94,000, and 85 percent of these were in three fields—psychology, chemistry, and biology. The psychologists made up the largest group of women scientists. One out

of every four psychologists was a woman. Next to psychology in terms of the proportion of women scientists was astronomy, one out of every six; in mathematics, one out of every ten.

The National Science Foundation Act of 1950 established the Register, which is administered jointly by the foundation and a number of professional societies. The information in the bulletin is based on voluntary registration with these cooperating societies. Limited numbers of copies of this bulletin are available. Requests should be addressed to: National Science Foundation, Washington 25, D.C.

USIA University Catalog Program

The U.S. Information Agency has undertaken a program to distribute overseas catalogs of American institutions having graduate schools. The purpose of the project is to acquaint people in other countries with the facilities of American higher education. USIA will bear all costs of transporting the material. To function effectively, the program will require 200 catalogs from each cooperating college or university.

Institutions wishing to participate in this project should write to Mrs. Anna B. Hendricksen, Information Center Service, U.S. Information Agency, 1776 Pennsylvania Ave., Washington 25, D.C.

Cancer Mortality Decline

Metropolitan Life Insurance Company statisticians have reported a downward trend over the past 10 years in the cancer death rate among women in middle life. Among the company's millions of industrial policyholders, mortality from all types of cancer was down by 13 percent for women at ages 45 to 64 over the 10-year period. There has been a one-third decline in the death rate from uterine cancer in this age range.

While the cancer death rate for middle-aged women declined, that for men rose somewhat. This was due principally to increased mortality among males from cancer of the lungs, buccal cavity, stomach, and urinary organs.

Army Ionizing Radiation Center

Sharpe General Depot at Stockton, Calif., has been chosen as the site for the U.S. Army Ionizing Radiation Center. The facility will be built by the Army Corps of Engineers and will include a nuclear reactor that is to be constructed by the Atomic Energy Commission.

The center will investigate the use of ionizing radiation in the preservation of

food and conduct other projects of interest to the Department of Defense. The Quartermaster Research and Development Command at Natick, Mass., will direct its operation.

The AEC reactor and related equipment will cost an estimated \$3 million. A preliminary design for the reactor, which will be of the water-moderated type with solid fuel elements, is now being completed for the commission by Internuclear Company of Clayton, Mo. The AEC is considering 11 proposals made by industrial concerns for the engineering design, fabrication, and construction of the reactor.

Other facilities of the center, costing an estimated \$4,500,000, will include a high-energy particle accelerator to be procured by the Quartermaster Corps, and offices, laboratories, and processing and storage areas that will be constructed by the Corps of Engineers according to specifications being developed by the Quartermaster Corps.

Initially the center will have as its primary mission the development of methods of utilizing ionizing radiation to preserve foods and to determine the economic feasibility of such a process. This aspect of the center's activities will be performed in conjunction with the Quartermaster Food and Container Institute, Chicago, which is conducting the overall Quartermaster Corps research and development program in the field of radiation preservation of food. This program includes contracts with 16 universities as well as contracts with research institutes and industrial concerns located throughout the country. The center is expected to be in operation in 1958.

NBS Boulder Radio Propagation Engineering Division Reorganized

The Radio Propagation Engineering Division of the National Bureau of Standards Boulder Laboratories has been reorganized with the original two research sections divided into seven new units. The reorganization is designed to facilitate the increased research that has grown out of the recent development and widespread use of tropospheric scatter propagation, radio noise, modulation, and navigation techniques. Two new assistant division chiefs have been named and eight other scientists given new assignments in the reorganization. Kenneth Norton continues as chief of the division.

J. W. Herbstreit and Kenneth O. Hornberg are the new assistant division chiefs. Herbstreit, who formerly was in charge of all tropospheric work, will now supervise research and development. Hornberg, the project leader of the Cheyenne Mountain tropospheric radio propa-