

half-time assistantships in the acoustics laboratory during each academic year.

The University of Scranton (Pennsylvania) has established electronics as a major field of study. Courses are available in electronic circuits, radio tubes and circuits, high-frequency wave propagation, ultra-high frequency and microwave theory and circuits, and electricity and magnetism.

June graduates of the California Institute of Technology were offered higher salaries than last year's crop, according to the Caltech placement office. Median monthly salary for bachelors was about \$340, for masters, \$405, engineers \$475, and PhD's \$495. Salaries as high as \$527 were offered students with the bachelor of science and master of science degrees, however, while some PhD's were offered salaries as high as \$750.

A fellowship in nuclear physics to support further graduate work at the Sarah Mellon Scaife Radiation Laboratory has been established at the University of Pittsburgh by the Westinghouse Educational Foundation. Payment of \$2000 per year will be provided, and the recipient will work toward and may complete the requirements for a master's degree.

The Oak Ridge Institute of Nuclear Studies will offer its next series of three basic courses in radioisotope techniques in research on January 5, February 2, and March 2. Application blanks and other information on the one-month courses may be obtained from Ralph T. Overman, Chairman, Special Training Division, Oak Ridge Institute of Nuclear Studies, P. O. Box 117, Oak Ridge, Tennessee.

Industry

Bausch & Lomb Optical Co. has reported the shipment of "the largest diffraction grating of its kind ever made" to the Los Alamos Scientific Laboratory in New Mexico for use in spectral analysis of heavy elements. 211,000 grooves were ruled in a seven-by-three-inch aluminum-coated area on one side of a round glass block. Although larger gratings have been made, the Los Alamos unit is said to have the largest area with so many grooves to the inch.

Eastman Kodak Company has developed a new infrared-sensitive motion picture film which is described as having a total "red speed" greater than any other material on the market. The company said that in tests conducted at the University of Rochester, successful motion pictures were made when house lights in a theater were dimmed to $\frac{1}{10}$ th of normal room illumination. The film (*Kodak Spectroscopic I-N*) was originally intended for use by spectroscopic laboratories, but it has also been found useful for other purposes, including ultra high-speed photography where its infrared sensitivity permits recording the flow and action of hot metals.

Asia's first helium liquifier has been installed in the low-temperature research laboratory of the Institute for Iron, Steel, and Other Metals at the Univer-

sity of Tohoku, Sendai, Japan, according to Arthur D. Little, Inc., consulting industrial research firm of Cambridge, Massachusetts, designers and producers of the unit, a Collins Helium Cryostat. Among the scientists who will carry on low temperature research in the Institute laboratory will be Eizo Kanda, Yoshio Shibuya, and Tadao Fukurai.

Cenco Corporation has announced plans for the construction of a new \$100,000 research and development laboratory in Chicago in order to extend its activities in the fields of electronics and chemistry. While Cenco's development of new products has in the past been confined largely to the field of physics, the many recent developments in electronics, according to the corporation, have led to its decision to expand. Cenco's 1953 budget for research and development indicates a sixty-seven percent increase over expenditures for this area of operation during the 1952 fiscal year.

The Pittsburgh Plate Glass Company is sponsoring a new multiple fellowship in support of research at the Mellon Institute in Pittsburgh. The research group will occupy itself with basic studies in solid state physics and in the several regions of chemistry which relate to glass technology. T. H. Davies, former acting director of the Institute of Radiobiology and Biophysics at the University of Chicago, will serve as administrative fellow for the group.

Establishment of a new laboratory for research and development work on jet engine controls has been announced by the Minneapolis-Honeywell Regulator Company in Minnesota.

The Atomic Center for Instruments and Equipment, Inc., a technical sales organization featuring the products of some twenty-five leading American, Canadian, and British manufacturers of atomic and nuclear science instruments, has established headquarters at 489 Fifth Avenue in New York City.

Beckman Instruments, Inc., manufacturer of scientific instruments in California, intends to consolidate its several operations in a single plant soon to be constructed near the towns of La Habra and Fullerton.

Charles Hire, professor of physics at Indiana University, died of a heart attack on September 9th. He was fifty-four years old. A native of Indiana, Professor Hire was a graduate of the University and served for ten years thereafter as a member of the physics department faculty. He received the PhD degree from Indiana in 1927. From 1925 until 1943 he headed the department of physical sciences of the State Teachers College at Murray, Kentucky, after which he returned to Indiana to supervise physics instruction for the Army Specialized Training Program. He served in 1944-45 as acting chairman of the Indiana physics department. Professor Hire was a member of the American Association of Physics Teachers and of the American Physical Society.