TURNER G. TIMBERLAKE has been appointed chief of the mechanical engineering department at the Corps of Engineers' Research and Development Laboratories, Fort Belvoir, Va. He fills a position left vacant when Robert W. BEAL was promoted to the position of director of applications engineering. Previously Timberlake, who has been with the Corps of Engineers for 10 years, had been chief of the maintenance engineering division of the Engineer Maintenance Center in Columbus, Ohio.

W. L. FAITH, chief engineer of the Air Pollution Foundation (Los Angeles, Calif.) since the organization began operations in 1954, has been named managing director of the organization. He succeeds LAUREN B. HITCHCOCK, who has resigned to return to private consulting practice in the industrial research and development field.

LLOYD E. THOMAS, formerly a professor in the biochemistry department of the University of Missouri School of Medicine, has joined the laboratory staff of the Good Samaritan Hospital, Portland, Ore., to start a research program at the hospital.

OTTO WALCHNER, aeronautical research engineer at the Air Research and Development Command's Wright Air Development Center, Ohio, has received the decoration for exceptional civilian service, the highest civilian award that the Air Force bestows, for his work as a research physicist in the field of armament aerodynamics. The citation, signed by the Secretary of the Air Force, read in part, "His outstanding and timely research in the critical problem of bomb release and predictability of its trajectories has resulted in developments of extraordinary importance." Besides the citation, the award consists of a gold medal and gold lapel emblem.

A former German scientist, Walchner was born in Weil, Germany. During World War II he worked as a research professor with the German Air Force at the Aerodynamics Research Center, Goettingen, Germany. He came to the United States in 1946 and was employed by the Air Force through the Joint Intelligence Objectives Agency alien specialist program.

PHINEAS J. SPARER, chief of psychiatry and psychosomatics at the Memphis (Tenn.) Veterans Hospital, has joined the staff of the University of Tennessee College of Medicine as professor of psychiatry and of preventive medicine. Sparer, author of the recent book Personality, Stress and Tuberculosis, has had extensive training in both the medical and psychological disciplines.

ALEXANDER SYMEONIDIS, former head of the geographic pathology unit of the National Cancer Institute, has been appointed professor of pathology and director of the Cancer Institute, Aristotelian University School of Medicine, Thessaloniki, Greece.

The American Society of Civil Engineers has awarded its 1956 research prizes as follows: to FRED BURG-GRAF, Washington, D.C., associate director of the Highway Research Board, "in recognition of outstanding contributions to knowledge through the administration of research in highway engineering and construction materials"; to CHESTER P. SIESS of the University of Illinois, Urbana, "in recognition of outstanding contributions to knowledge through his research on reinforced concrete slabs"; and to VINTON W. BA-CON, Sacramento, Calif., executive officer of the California State Water Pollution Control Board, "in recognition of achievements in applied research on waste water reclamation, pollution and water quality."

LAWRENCE M. KUSHNER has been selected to head the newly organized metal physics section of the National Bureau of Standards Metallurgy Division. He is the former assistant chief of the surface chemistry section. The new section will supplement the present program of the division's other four sections in the broad fields of mechanical, chemical, and thermal metallurgy and corrosion.

The Institute of Radio Engineers, Inc., has announced the recipients of three of its annual awards for 1957. The presentation of these awards will be made during the IRE national convention, which will be held 18–21 Mar. in New York.

O. G. VILLARD, Jr., professor at Stanford University, Stanford, Calif., will receive the Morris Liebmann memorial prize "for his contributions in the field of meteor astronomy and ionosphere physics which led to the solution of outstanding problems in radio propagation."

DONALD RICHMAN, supervising engineer at the Hazeltine Corporation, Little Neck, N.Y., will receive the Vladimir K. Zworykin prize "for contributions to the theory of synchronization, particularly that of color subcarrier reference oscillator synchronization in color television."

GEORG GOUBAU, physicist at the Signal Corps Engineering Laboratories, Fort Monmouth, N.J., will receive the Harry Diamond memorial prize "for his many contributions in ionospheric research and circuit theory and for his discovery of the surface wave transmission principle."

J. REID CLEMENT, JR., a physicist at the Naval Research Laboratory, Washington, D.C., has been awarded the Meritorious Civilian Service award for his achievements in cryogenics. The award is the second highest given to a civilian employee. Clement was recognized for his development of a carbon-composition thermometer and for his research and recommendations which lead to international agreement on a new temperature scale. As a result, Clement's thermometer is presently being used in most low temperature laboratories in this country as well as in Europe and Asia.

SIDNEY N. GELLIS, who recently concluded 5 years as chief of the tuberculosis section in the Veterans Administration Hospital at Tucson, Ariz., has joined the research staff of Eli Lilly and Company, Indianapolis, Ind.

ROLLAND PERRY has rejoined Argonne National Laboratory as an associate physicist in the Particle Accelerator Division. From 1946 to 1948, and from July 1951 through September 1951, Perry was with Argonne as an associate physicist; since that time, he has been head of the department of physics at Utah State College.

Recent Deaths

THOMAS S. ARBUTHNOT, Pittsburgh, Pa.; 85; president of the Carnegie Hero Fund and former dean of the medical school at the University of Pittsburgh; 2 Dec.

RAYMOND E. BASSETT, Durham, N.H.; 52; chairman of the department of sociology at the University of New Hampshire; 4 Dec.

HÂRRY R. BRYSON, Manhattan, Kan.; 64; associate professor of entomology at Kansas State College; 3 Dec.

HORACE G. BYERS, Arlington, Va.; 83; head of the chemistry department at Cooper Union from 1919–28; chief of the division of soil chemistry and physics of the Bureau of Chemistry and Soils, U.S. Department of Agriculture until 1942; 2 Dec.

LESTER D. GARDNER, New York, N.Y.; 80; founder of the Institute of the Aeronautical Sciences; 23 Nov.

S. PHILIP GOODHART, New York, N.Y.; 84; former professor of neuropsychiatry at New York Polyclinic Medical School and professor of clinical neurology at the College of Physicians and Surgeons of Columbia University; 6 Dec.

NATHAN C. GROVER, Washington, D.C.; 88; retired chief hydraulic engineer for the U.S. Geological Survey; 29 Nov.

LANDON C. HAYNES, Greenville, Tenn.; 99; professor emeritus of physics

and mathematics at Tusculum College;

ALICE M. HUNT, Westport, Mass.; 76; associate professor emeritus of anesthesia at the Yale University School of Medicine; 30 Nov.

GEORGE T. MOORE, St. Louis, Mo.; 87; emeritus director of the Missouri Botanical Garden; 27 Nov.

HENRY F. PERKINS, Burlington, Vt.; 79; professor emeritus of zoology at the University of Vermont; 24 Nov.

WALTER A. SCHNEIDER, Hastings-on-the-Hudson, N.Y.; 57; professor of physics at New York University; 20 Nov.

ALICE M. SCOTT, Philadelphia, Pa.; 79; one of the first women to receive a Ph.D. in chemistry from the University of Pennsylvania; 30 Nov.

MELVILLE B. WELLS, Chicago, Ill.; 70; professor emeritus and former head of the aeronautical engineering department at Armour Institute of Technology; 1 Dec.

WILLIAM P. WOODSIDE, Phoenix, Ariz.; 79; founder member of the American Society for Metals; 5 Dec.

Education

- The University of Rochester will add an electrical engineering course to its curriculum next fall. Students entering the program will have the option of taking a 4-year course leading to a degree of bachelor of science in electrical engineering, or a 5-year course in which both the bachelor of science and the bachelor of arts degree will be given simultaneously.
- The Medical Division of the Oak Ridge Institute of Nuclear Studies has announced that it will present a series of six thyroid-uptake seminars this winter and next spring to provide instruction in a standard method of calibrating the uptake of radioiodine by the thyroid. Two of the sessions will be open to invited physicians and physicists; two will be open to all other qualified physicians and physicists; one will be designed for manufacturers' representatives; and one will be open to qualified technicians.

These seminars are an outgrowth of a thyroid-uptake calibration program initiated by ORINS more than 3 years ago. In the first phase of the program, life-size half-body mannequins containing simulated thyroid glands with suitable amounts of "mock-iodine" (a radioactive barium-cesium mixture whose gamma emission spectrum closely resembles that of iodine-131) were sent about the United States and England for testing by approximately 300 scientists and physicians. The results of these tests were correlated by the Medical Division to determine the efficacy of the various

testing methods used, and the information obtained was applied to studies made at a seminar for experts in the thyroid-uptake field held at ORINS in September.

In view of the success of the September seminar, the six seminars have been scheduled. Detailed information and application forms may be obtained by writing to Mr. William Busby, ORINS Medical Division, P.O. Box 117, Oak Ridge, Tenn.

■ A new cancer chemotherapy laboratory, which also serves as headquarters for the pharmacology department of the Stanford University Medical School, has been established on the university's Palo Alto campus. The pharmacology move marks the first step toward consolidation of the medical school facilities, now in San Francisco, with the university proper. By 1959 the entire school is expected to be housed in a \$22-million medical center soon to be started on the campus.

Avram Goldstein, who heads the pharmacology department, will direct the new research facility, which was built and equipped with the aid of \$50,000 from the National Cancer Institute of the U.S. Public Health Service, plus \$10,000 from university funds. A radioisotope laboratory also has been set up in the new space with gifts totaling \$6700 from the Ladies Auxiliary of the California Department of the Veterans of Foreign Wars.

The cancer chemotherapy laboratory is located in the basement of the Anatomy Building. It has three offices, seven laboratories, an animal room, and several small special-purpose rooms. An additional grant of \$68,000 from the National Cancer Institute is supporting research for the first year.

■ The 87th annual report of the American Museum of Natural History that has just been released includes a historical survey of the museum's educational services. The publication points out that the museum's first direct teaching program—a zoology course for teachers given in 1880 by one instructor—was to lead to the establishment of the Department of Public Instruction, which today has perhaps the largest teaching staff of any museum in the world.

In the year covered by the report 1,783,433 people visited the museum and 573,000 visited its planetarium—a total attendance of 2,356,433. In addition, nearly 18 million people were reached through courses, lectures, and circulating exhibits, films, and slides.

■ The second astronomical observatory in New York City—the only other is Columbia University's—will be opened for use in January at the Fieldston School,

an independent school attended by some 600 students that is one of the three New York Ethical Culture schools. Fieldston is one of the first secondary schools in the country to have its own observatory.

Both the observatory and its 8-inch Newtonian-type telescope are the work of an amateur astronomer, Eugene Kada, whose profession is precision instrument making. In 1950 Kada gave his 8-inch telescope to the school, and he has spent all his spare time for the past 3 years in planning and building an observatory in which to mount the 7-foot, 200-pound instrument. The new facility, the Kada Observatory, is a hexagonal structure that has been erected on the roof of Fieldston's auditorium, which stands on the highest hill in the area. It is 13 feet to the top of the observatory's revolving dome.

■ The first radioactive cobalt-60 unit for cancer therapy in the state of Maryland has been installed in the University of Maryland's division of radio therapy of the department of radiology in Baltimore. Assembly work on the \$28,500 machine has just been concluded with the insertion of the \$6500 cobalt source. Approximately \$18,000 has been spent in renovation of part of the university's Psychiatric Institute to provide treatment, waiting, and dressing rooms; offices; and an especially equipped room for the 3-ton machine.

To be known as the Martha V. Filbert Radiation Center, the facility was made possible by a \$35,000 gift from the Filbert Foundation as a memorial to Mrs. Filbert by her son, Alvin B. Filbert; her daughter, Mrs. E. H. Landauer; and her late son, John H. Filbert. Other gifts to the cancer therapy center included \$8000 from the University Hospital's Women's Auxiliary Board and \$5000 from the National Brewing Company of Baltimore.

Grants, Fellowships, and Awards

■ The American Academy of Arts and Sciences recently reviewed 34 applications for grants from its Permanent Science Fund Committee. Thirteen grants, totaling \$6693.20, were awarded. They covered projects in biology, chemistry, botany, and mathematics.

The academy invites applications for grants from its Permanent Science Fund. Awards are made in support of research in any field of science whatsoever in amounts that ordinarily do not exceed \$1500. Applications for grants to be made in the early spring should be filed by 1 Feb. 1957 on forms that may be obtained from: The Chairman, Permanent Science Fund Committee, American Academy of Arts and Sciences, 77