was assistant director in charge of development for Colgate-Palmolive Company.

ROGER REVELLE, director of the Scripps Institution of Oceanography at La Jolla, Calif. is one of nine specialists appointed by the director-general of UNESCO to serve on the newly established International Advisory Committee on Marine Sciences.

H. THERON THOMPSON, formerly assistant to the director of research for the General Aniline and Film Corporation at Easton, Pa., has been appointed as consultant on operations analysis at the General Electric Research Laboratory, Schenectady, N.Y.

MELVIN MARTENS, for the past 6 years an electronic scientist at the National Bureau of Standards, has been named an electronics project leader in the medical equipment division of the Colson Corporation, Elyria, Ohio. He has been assigned to development work in connection with electronic hospital equipment, including automatic blood pressure recorders and cuvette densitometers.

J. TH. G. OVERBEEK, director of the Van't Hoff Laboratory, Utrecht, the Netherlands, is delivering this year's Falk-Plaut lectures in chemistry at Columbia University. The subject of the lectures is "Electrochemistry of colloids and phase boundaries."

HEINZ G. F. WILSDORF, principal research officer of the National Physical Laboratory, Council for Scientific and Industrial Research, Pretoria, Transvaal, Union of South Africa, will join the staff of the Franklin Institute early in the summer as senior research metallurgist in the Solid State Physics Division. Wilsdorf has recently published several papers on the slip band formation and the surface structure of deformed aluminum. Some of his most recent work has concerned the study of dislocations as evidenced by precipitation in aluminum copper alloys.

RENNE S. JULIAN has been appointed technical director of the Hughes Aircraft Company guided missile laboratories. With Hughes since 1949, Julian previously served as head of the electronics department of the laboratories. His patents and publications include work in microwaves, electron tubes, and molecular beam measurements.

HUGO THEORELL, 1955 Nobel prize winner in physiology and medicine and director of the biochemical department of the Nobel Institute in Stockholm, Sweden, delivered the 52nd annual Christian A. Herter lecture at the New York University College of Medicine on 5 Mar. He spoke on "Kinetics and equilibria in flavoprotein enzyme systems."

EDWARD J. HUGHES, manager of Eli Lilly and Company's analytical department for the last 25 years, retired on

29 Feb. During his service with Lilly, Hughes has been a leading proponent of the advancement of analytical methods and techniques through the use of instrumentation.



A native of Pennsylvania, Hughes was graduated from the Philadelphia College of Pharmacy and Science in 1916 with the degree of doctor in pharmacy. In 1925 he did graduate work in experimental organic chemistry at the University of Pennsylvania, and in 1938 he was awarded an honorary master of pharmacy degree by the Philadelphia College of Pharmacy and Science.

After a year's military service in World War I, Hughes returned in 1919 to the Philadelphia College of Pharmacy as an instructor and, later, assistant professor of chemistry. He joined Lilly in 1927 as assistant to the production superintendent and was transferred 2 months later to the formula control department as a pharmaceutical chemist; he has held his present post since 1930. Hughes has been a member of the editorial staff of Remington's *Practice of Pharmacy* for the last four editions and has been associated with many revisions of the U.S. Pharmacopoeia.

Recent Deaths

MARY F. BABCOCK, Providence, R.I.; 61; authority on natural history; coauthor of a series of science textbooks; 2 Mar.

ANGELO E. BENAGLIA, Washington, D.C.; 48; biochemist; staff member of the National Academy of Sciences-National Research Council; 3 Mar.

CAMERON DUNCAN, Brooklyn, N.Y.; 80; clinical professor emeritus of obstetrics and gynecology at the State University of New York College of Medicine; 4 Mar.

LOWELL A. ERF, Philadelphia, Pa.; 48; assistant professor of medicine at Jefferson Medical College and assistant director of the Charlotte Drake Cardeza Foundation; 30 Jan.

ARTHUR FELIX, London, England; 68; former director of the Central Enteric Reference Laboratory; codiscoverer of the Weil-Felix reaction for typhus diagnosis; developer of the Vi-phage typing method for tracing typhoid epidemics; 14 Jan.

WILLEM H. KEESOM, Leyden, the Netherlands; 79; professor of physics at Leyden University, 1923–45; specialist in low-temperature research and the first scientist to solidify helium; 4 Mar.

FRANKLIN DAVID KEIM, Hardy, Neb.; 69; chairman of the department of agronomy at the University of Nebraska, 1932–52; president of the American Society of Agronomy in 1943; secretary of AAAS Section O since 1954; 7 Mar.

CARL H. LAWS, Brooklyn, N.Y.; 71; former professor of pediatrics and professor of child health and welfare at Long Island College of Medicine; 29 Feb.

PATRICK J. MCKENNA, New York, N.Y.; 58; authority on horticulture; former assistant horticulturist at the New York Botanical Gardens; 2 Mar.

JOSEPH PRATT, Boston, Mass.; 83; emeritus professor of medicine at the Tufts College medical school; 3 Mar.

FRED T. ROGERS, JR., Columbia, S.C.; 41; head of the physics department at the University of South Carolina; 22 Feb.

JOHN H. VAN DEVENTER, Brewster, N.Y.; 74; engineer; former editor of *Iron Age*; 5 Mar.

Grants, Fellowships, and Awards

• Entries for the fourth annual Howard W. Blakeslee awards competition of the American Heart Association may be submitted through *1 May*. The competition is open to newspaper and magazine articles, books, radio and television programs, and films published or produced between 1 Mar. 1955 and 1 Mar. 1956.

The number of awards to be made, each carrying a minimum honorarium of \$500, will be determined by the judges. Presentation of the awards will take place during the annual meeting of the AHA in Cincinnati, Ohio, 27–31 Oct.

• A trust, estimated at slightly more than \$100,000, has been established at the University of Wisconsin by Joseph S. Daniels of Rhinelander, Wis., the income of which is to support a professorship in the University of Wisconsin Medical School. The holder of the professorship will be known as the Doctor Alfred D. Daniels professor on diseases of children. The Medical School plans to make an appointment to this professorship in the near future.

A series of special scholarships aimed at increasing the number of adequately trained secondary school science teachers has been established at Massachusetts Institute of Technology. Beginning next fall the institute will award a number of scholarships in amounts ranging up to full tuition to junior students who have elected the institute's professional program in science teaching. The scholarships will be renewable.

■ A 2-year fellowship in forest pathology is offered by the University of Idaho beginning 1 July 1956. The research program, leading to the degree of Master of Science in Forestry, will be part of a cooperative project on the pole blight disease of western white pine. The annual stipend is \$1740, with the candidate working full time during the summer field season and approximately one-third of the time during the academic year. In addition to the regular salary, travel expenses are paid during the field season, and transportation is provided by the College of Forestry. Interested persons should write to Dean E. W. Wohletz, College of Forestry, University of Idaho, Moscow, before 1 Apr.

• A research fellowship in chemistry and possibly one in biology will be available to high-school science teachers this summer at South Dakota State College, one of 37 colleges and universities in the United States participating in the program which is being sponsored by the Future Scientists of America foundation of the National Science Teachers association.

Applicants will be selected on the basis of their background and experience. Fellowships will be available for either the 5-week or 8-week summer sessions, both of which begin June 11. Interested persons should write to Dean Frank G. Schultz, South Dakota State College, Brookings.

■ Under a program supported financially by the Carnegie Corporation of New York, with the cooperation of the Arctic Institute of North America, the Mc-Gill University-Carnegie arctic scholarships are offered to students possessing a bachelor's or master's degree or the equivalent. These scholarships are tenable at McGill University in Montreal, and are ordinarily for students who plan to proceed to a doctoral degree in a subject calling for active field research in arctic or subarctic North America.

Candidates who do not intend to proceed to a degree are not necessarily disqualified. Such subjects as anthropology, bacteriology, botany, geography (including glaciology and meteorology), geology, genetics, parasitology, psychiatry, psychology, sociology, and zoology (including marine biology) will be considered.

The scholarships are usually for 1 year and are renewable for a second year. Their average value is \$1500 for the academic session, and \$1250 for the expenses of a summer's field expedition. If re-

newed for a second session, the scholarships will average \$1750.

Applications should be submitted to the Secretary of the Carnegie Arctic Program, McGill University, 539 Pine Ave., W. Montreal, Canada, and should include a recommendation of the candidate's qualifications in his or her selected field and a clear statement of the intended research project. Applications for 1956–57 should reach Montreal by 15 Apr.

• The Chesapeake Section of the American Association of Physics Teachers has announced the inauguration of a scholarship program under which 10 colleges and universities will award 13 scholarships to high-school seniors in Delaware, Maryland, Virginia, and the District of Columbia. Scholarship winners will be determined by a competitive examination to be given on 5 May at six test centers. The total value of the scholarships is in excess of \$18,000.

In the Laboratories

• The General Dynamics Corporation has leased approximately 300 acres of land from the city of San Diego, Calif., for the construction of a laboratory for the corporation's General Atomic Division. The new facility will be devoted to pure and applied research, with particular emphasis in the nuclear field. Initially attention will concentrate on basic research leading to the development of more efficient reactor systems.

Edward C. Creutz, former director of the Nuclear Research Center at Carnegie Institute of Technology is director of research for General Atomic and will direct the activities of the laboratory. Henry B. Fry, former assistant manager of the Atomic Energy Commission's Santa Fe operations office, is director of administration.

• The General Electric Research Laboratory's new European office now has a permanent address at Pelikanstrasse 37, Zurich 1, Switzerland. Creation of the overseas office was announced by the Research Laboratory last December when George J. Szasz was named as G.E.'s first scientific representative abroad.

• The Crane Company and the Vitro Corporation of America have announced that they have agreed to participate jointly in a company to produce thorium, rare earths, rutile, and other minerals. Each concern will have a 40-percent interest in the Heavy Minerals Company and its mining subsidiary, Marine Minerals, Inc. A 20-percent interest will continue to be held by a subsidiary of the French chemical group of Pechiney. This concern is the Société de Produits Chimiques des Terres Rares, but it is customarily known as S.T.R. Heavy Minerals has an exclusive North American license to numerous patents held by S.T.R. on the processing of thorium, rare earths, and other minerals.

• The Nuclear Development Corporation of America has begun construction of a radiochemical laboratory building at its Nuclear Experimental Station in Pawling, N.Y. This facility is the second link in the development of the Pawling station. Construction began several weeks ago on a critical facility building.

Primary purpose of the new laboratory is to study the effects of radiation on fuel elements and structural components of nuclear reactors by examining the radioactive test specimens after they have been irradiated in a test reactor. A secondary use of the facility will be to study the effect of radiation on nonreactor materials. Extensive research is going on in many parts of the country to determine possible uses of nuclear radiation in such fields as food sterilization, polymerization, and production control devices. The new laboratory will enable N.D.A. to conduct research in these fields.

• Manufacture of high-pressure acetylene products on a full commercial scale got under way in Calvert City, Ky., when operations were started at the new \$6 million plant of General Aniline and Film Corporation. A pilot plant for the acetylene derivatives has been operated by General Aniline at its Linden, N.J., installation since 1947, and a great many of the new products have been manufactured there in semicommercial and laboratory quantities.

Listed in the new product line to be manufactured here are propargyl alcohol, propargyl bromide, butynediol, 1,4-butanediol, butyrolactone, pyrrolidone, methylpyrrolidone, vinylpyrrolidone, polyvinylpyrrolidone (PVP), and PVPiodine.

An RCA-designed compatible color television "studio-on-wheels" for medical use has been purchased by Smith, Kline and French Laboratories, Philadelphia pharmaceutical firm, for closed circuit presentations of surgical and clinical demonstrations. The novel mobile "studio" incorporates three color TV cameras and all control room equipment necessary for S.K. and F.'s Color Television Unit to originate medical colorcasts from virtually any hospital in the country. The RCA compatible color TV studio-on-wheels also will enable S.K. and F. for the first time to originate and transmit medical colorcasts to TV stations for local or network broadcast.