Therapeutics of the American Medical Association; and in 1956 he was elected president of the Albertus Magnus Guild of Catholic Scientists.

J. R. WOLFF, who has been with Argonne National Laboratory since 1949, is now director of research at the Radiation Instrument Development Laboratory, Chicago, Ill. His responsibilities will include correlating the laboratory's engineering and development activities with those of Intertechnique of Versailles, France, which manufactures R.I.D.L. equipment.

MILTON ORCHIN, professor of chemistry and acting chairman of the department of chemistry at the University of Cincinnati, has received the eighth annual "Eminent Chemist" award of the Cincinnati section of the American Chemical Society.

CARL F. J. OVERHAGE has been appointed director, and WILLIAM H. RADFORD associate director, of Lincoln Laboratory at Massachusetts Institute of Technology. Both men have been division heads at Lincoln. They succeed, respectively, MARSHALL G. HOLLOWAY and GEORGE E. VALLEY, who have resigned. Holloway will go to a new position in industry, and Valley, promoted from associate to full professor of physics, is returning to faculty service on the M.I.T. campus in Cambridge.

Another appointment at M.I.T. is that of CLAUDE E. SHANNON, who will have the dual title of professor of communications sciences in the department of electrical engineering and professor of mathematics. For the past year Shannon has been visiting professor of electrical communications, while remaining a research mathematician on the staff of Bell Telephone Laboratories. He will continue collaborative work with Bell. Shannon has achieved special eminence in the field of information theory, a new science which combines the methods of mathematics and electrical communications in computing, automation, and areas of the behavioral sciences that bear on the relation of man to his environ-

FRANK W. HURD has been appointed director of research for the Union Carbide Nuclear Company, a division of the Union Carbide and Carbon Corporation. Hurd has been identified with the corporation's activities in the atomic energy field since 1943, when he joined the Manhattan Engineering District project at Columbia University as a senior research scientist. In 1955 he was appointed superintendent of research and development, industrial applications, for Union Carbide Nuclear Company.

NORMAN HILBERRY has been named director of Argonne National Laboratory of the University of Chicago, which operates the laboratory for the U.S. Atomic Energy Commission. Deputy director of Argonne since it was established in 1946, Hilberry succeeds WALTER ZINN, who resigned last June.

The Wagner Free Institute of Science, Philadelphia, Pa., has selected three scientists for this year's Westbrook Free Lecture series, which is entitled "Scientific progress and human needs." The lecturers will discuss the subject from the standpoint of human ecology, the present and future contributions of chemistry, and the future development of solar energy.

The following scientists have accepted invitations to participate: 4 Apr., WIL-LIAM VOGT, national director, Planned Parenthood Federation of America, "The structure of survival"; 11 Apr., GEORGE R. SEIDEL, technical adviser, E. I. Du Pont de Nemours and Company, "The one best way"; and 18 Apr., MARIA TELKES, project director, New York University, "The uses of solar energy."

G. ROBERT GREENBERG, associate professor of biochemistry at Western Reserve University, has been appointed professor of biological chemistry at the University of Michigan. During the past year he has served as a senior National Science Foundation fellow, working at Kings College in England.

ALMA HILLER has retired from his positions as associate attending biochemist in charge of clinical chemistry at Presbyterian-St. Luke's Hospital, Chicago, Ill., and associate professor of biological chemistry at the University of Illinois College of Medicine.

RCA Laboratories, Princeton, N.J., has announced that ROLF W. PETER has been appointed director of the Physical and Chemical Research Laboratory, and ALLEN A. BARCO, director of the Systems Research Laboratory. Peter, research physicist at the laboratories since 1948, succeeds HUMBOLDT W. LEV-ERENZ, who has been named assistant director of research, RCA Laboratories. Barco, who has been engineer-in-charge of the Industry Service Laboratory at the David Sarnoff Research Center, succeeds GEORGE H. BROWN, who has been appointed chief engineer, RCA Commercial Electronic Products.

JOHN H. MELVIN, state geologist of Ohio since 1947, has been elected vice president for operations of the Pennsylvania Drilling Company of Pittsburgh GEORGE M. AUSTIN of Philadelphia, Pa., will become the first full-time head of the division of neurosurgery at the University of Oregon Medical School. He will succeed JOHN RAAF, who has been advanced to clinical professor of surgery and senior consultant in neurosurgery. Austin practices neurosurgery in Philadelphia and holds an appointment as assistant professor of neurosurgery at the University of Pennsylvania Medical School. He will assume his new position on 1 July.

Recent Deaths

CHARLES S. CARLETON, Suffield, Conn.; 84; former professor of civil engineering at Norwich University; 21 Feb.

SAMUEL W. CROLL, Bernardsville, N.J.; 67; mechanical engineer; 26 Feb.

ELMER A. HOLBROOK, Pittsburgh, Pa.; 75; former dean of the school of engineering at the University of Pittsburgh; 20 Feb.

UBERT C. HOLLAND, New Brunswick, N.J.; 67; professor emeritus of engineering drawing at Rutgers University; 26 Feb.

JOHN H. HOSKINS, Cincinnati, Ohio; 61; head of the department of botany at the University of Cincinnati; 8 Feb.

JOHN A. KING, Jr., Verona, N.J.; 60; retired research engineer at the Radio Corporation of America's tube division; 22 Feb.

ERNST KRIS, New York, N.Y.; 56; psychoanalyst and faculty member of the New York Psychoanalytic Institute and the Child Study Center at Yale University; 27 Feb.

HOWARD H. LONG, Wilberforce, Ohio; 69; dean of Central State College; 21 Feb.

JOHN F. MAHONEY, Arrocha, N.Y.; 67; director of the bureau of laboratories in the New York City Department of Health and former Health Commissioner of New York; 23 Feb.

GEORGE F. STRONG, Vancouver, B.C., Canada; 60; president of the National Heart Foundation of Canada; 26 Feb.

FRED W. TANNER, Winter Park, Fla.; 69; former head of the department of bacteriology at the University of Illinois; 24 Feb.

JAMES P. WARBASSE, Woods Hole, Mass.; 90; surgeon, author, and leader in the cooperative movement who also is credited with having set up the first laboratory of surgical pathology and bacteriology in America at Methodist Hospital in 1892; 22 Feb.

MILTON WASCH, Brooklyn, N.Y.; 72; former clinical professor of radiology at the Long Island College of Medicine; 22 Feb.