lishment and operation of a national astronomical observatory at a site to be selected in Arizona. Meinel has been associate director of the Yerkes and McDonald Observatories since 1953, but recently he has been on leave to work on the program for the new observatory.

Early in the spring of 1955 he began field work for the selection of possible sites for an astronomical observatory in the southwestern area. Assisted by H. A. Abt, Meinel made a comprehensive examination of the entire geographic region bounded by the Rio Grande on the east, the 36th parallel on the north, and the geographical limits of the United States on the south and west. All available rocket high-altitude photographs were carefully examined. The two scientists flew thousands of miles in a small plane and traveled great distances by car and jeep in the course of their examination of every possible site. Meinel will continue to direct work on the observatory from his present field office in Phoenix, Ariz., until such time as a site has definitely been selected.

CONRAD A. ELVEHJEM, biochemist and dean of the University of Wisconsin's Graduate School since 1946, has been elected 13th president of the university, effective 1 July. He succeeds EDWIN B. FRED, who will become president emeritus and emeritus professor of bacteriology. Elvehjem gained international prominence late in the 1930's when he isolated nicotinic acid, which led directly to the cure for human pellagra. He has been a leader in research in nutrition and vitamin B complex work.

PAUL M. FYE, associate technical director for research at the Naval Ordnance Laboratory, Silver Spring, Md., and special adviser for the Polaris Missile Program, has been named director of the Woods Hole Oceanographic Institution. He succeeds COLUMBUS O'S. ISELIN, who has been director of the institution since 1956, and who also served as director from 1940 to 1950. Iselin will continue to be associated with the institution and has been elected to be the first Henry Bryant Bigelow oceanographer, a chair founded recently by the board of trustees.

The National Academy of Sciences-National Research Council has announced that ERNEST H. VOLWILER is chairman-designate of its Division of Chemistry and Chemical Technology. Volwiler, president and general manager of Abbott Laboratories, will succeed FREDERICK D. ROSSINI on 1 July. Rossini, head of the department of chemistry at Carnegie Institute of Technology, has served as division chairman since 1 July 1955.

The first David Sarnoff Outstanding Achievement Awards in Science and Engineering are to be presented to ALBERT ROSE of the technical staff of RCA Laboratories, and DAVID K. BARTON of the engineering staff of RCA Defense Electronic Products. Rose is being cited "for basic contributions to the understanding and utilization of photoelectronic phenomena," and Barton for "important contributions to precise tracking radars."

The two awards, to be made annually to the outstanding scientist and the outstanding engineer of the Radio Corporation of America, were established in September 1956 to commemorate the 50th anniversary in radio of DAVID SARNOFF, chairman of the board of RCA. The medals will be presented to both men by Sarnoff early in March.

CHARLES H. TOWNES, professor of physics at Columbia University, has received the \$2500 Research Corporation Award for his work in microwave spectroscopy. Townes' research has: (i) provided a new order of accuracy in the measurement of time—a ±1-second deviation every 300 years; (ii) produced amplifiers some 100 times more sensitive than previously known types, thus expanding the range of radio astronomy; (iii) gained detailed information, previously unknown, on the structure of molecules by measuring the frequencies to which they respond.

NICOLAAS BLOEMBERGEN, Gordon MacKay professor of applied physics at Harvard University, was awarded the \$1000 Oliver E. Buckley Solid State Physics Prize by the American Physical Society at its recent annual banquet. He was honored "for his studies of magnetic resonance both nuclear and electronic and of its uses in the investigation of solids, liquids and gases." The Buckley prize was endowed by Bell Telephone Laboratories in honor of the Laboratories' former president, who retired in 1952.

HERBERT FEIGL, director of the Minnesota Center for Philosophy of Science and professor of philosophy at the University of Minnesota, is serving as Carnegie visiting professor at the University of Hawaii in Honolulu from 4 February to 5 June. He is offering courses and seminars in the philosophy of science.

ALAN R. GRUBER has been appointed assistant chief engineer to head nuclear systems research in Astro, a division of the Marquardt Aircraft Company, Van Nuys, Calif. Gruber was formerly manager of the engineering department for the Nuclear Develop-

ment Corporation of America, White Plains, N.Y.

LOUIS M. LAUSHEY, since 1954 professor of civil engineering and department head at Norwich University, Northfield, Vermont, will assume the corresponding post at the University of Cincinnati, effective 1 September.

RAYMOND J. EMRICH, professor of physics at Lehigh University, has been named head of the department of physics. He succeeds FRANK E. MYERS, who has been granted a 2-year leave of absence to accept appointment as associate director at Argonne National Laboratory, Lemont, Ill.

The Very Rev. MICHAEL P. WALSH has been appointed 22nd president of Boston College. He will succeed the Rev. JOSEPH R. N. MAXWELL, who has been president since 1951. Walsh has been chairman of the department of biology and director of premedical students at the college.

Recent Deaths

ALICE BRONFENBRENNER, Minneapolis, Minn.; 31; research investigator in the department of pediatrics, Variety Club Heart Hospital, University of Minnesota; 16 Jan.

ANDRE CROTTI, Columbus, Ohio; 84; physician and surgeon, world-famous for goiter surgery; at his retirement 3 years ago he had performed 16,000 thyroid operations; 31 Jan.

ERNST HEINKEL, Stuttgart, W. Germany; 70; aeronautical engineer and airplane manufacturer; jet aircraft pioneer; 30 Jan.

ALBERT E. HENNINGS, Vancouver, B.C., Canada; 78; professor emeritus of physics at the University of British Columbia; 13 Jan.

NEWMAN HOOPINGARNER, Halesite, N.Y.; 66; professor emeritus of business psychology at New York University's School of Commerce, Accounts and Finance; 27 Jan.

ALFRED E. HUDD, London, England; 75; inventor of a system of automatic train control; 3 Feb.

ERNEST H. KOCH, Jr., Philadelphia, Pa.; 82; for 20 years before his retirement in 1942 he had been associated with the Brooklyn New York Technical High School as a teacher, vice principal, and dean; 28 Jan.

MAURICE STRAUSS, New Haven, Conn.; 65; clinical professor emeritus of dermatology of the Yale University School of Medicine; 3 Feb.

SAM F. TRELEASE, New York, N.Y.; 65; Torrey professor of botany at Columbia University; 1 Jan.