we hear that

P. Reinhardt, associate professor of chemistry at Harvard University; Hannelore E. Saraph, senior research fellow at University College London, UK; Lewis E. Synder, associate professor in the astronomy department, Leander McCormick Observatory, University of Virginia, Charlottesville; Sabatino Sofia, professor of astronomy at the University of South Florida, Tampa; Robert F. Stein, assistant professor of astronomy at Brandeis University, Waltham, Massachusetts, and Hugh M. Van Horn, associate professor in the department of physics and astronomy at the Space Science Center, University of Rochester, Rochester, New York.

Formerly a research fellow at the California Institute of Technology, Gary Steigman has been appointed assistant professor of astronomy at Yale University.

William Stratton, of Los Alamos Scientific Laboratory, has been elected vice-chairman of the US Atomic Energy Commission's advisory committee on reactor safeguards for 1973.

Kenneth L. Verosub, formerly of Stanford University, has been appointed assistant professor of physics and geophysics at Amherst College.

Albert M. Clogston, formerly vice-president for research at Sandia Laboratories, has been named executive director of the research physics and academic affairs division of Bell Laboratories.

Martin Deutsch, a professor in the physics department at the Massachusetts Institute of Technology, has been named director of the MIT Laboratory for Nuclear Science. He succeeds Peter T. Demos, who has become permanent director of MIT's Bates Linear Accelerator at Middleton, Massachusetts.

obituaries

Immanuel Estermann

Immanuel Estermann, professor emeritus of physics at the Technion in Israel and at the University of Hamburg, died on 30 March in Haifa, Israel.

Born in Berlin, Germany in 1900, Estermann earned a PhD in physical chemistry at the University of Hamburg (1921). From 1933 to 1952 he taught at the Carnegie Institute of Technology (now Carnegie-Mellon University) in Pittsburgh as an associate professor and professor. Prior to joining the Technion in 1964, he worked with the Office of Naval Research in Washington and London. Estermann was an editor of volumes in the series Methods of Experimental Physics and Advances in Atomic and Molecular Physics, both published by Academic Press.

Howard Hathaway Aiken

Howard Hathaway Aiken, Distinguished Professor of Information Technology at the University of Miami, died in St Louis on 14 March. He was 73.

Aiken was known for his role in the design of the first large-scale digital computer, the Mark I. In cooperation with the engineering department of International Business Machines Corporation, he designed and built the Mark I while stationed at Harvard University as a Naval Reserve Com-

mander (1941-46). The computer was dedicated in 1944.

Born in 1900 in Hoboken, New Jersey, Aiken received a BS in electrical engineering from the University of Wisconsin (1923). After working for over a decade in this field, he resumed an earlier interest in physics, taking an AM (1937) and PhD (1939) at Harvard. He continued at Harvard as a member of the faculty from 1939 to 1961, when he was named Distinguished Professor of Information Technology at the University of Miami in Florida. From 1946 to 1961 he was director of the computation laboratory at Harvard.

Harold A. Zahl

Harold A. Zahl, a former director of electronics research for the US Army, died on 11 March in Redbank, New Jersey. He was 68 years old.

After receiving his PhD in physics from the State University of Iowa in 1931, Zahl joined the Signal Corps laboratory of the US Department of the Army as a research physicist. In 1946 he was promoted to director of research there, a post he held until 1966, when he became a research consultant.

Zahl was known as the inventor of the TR tube, a device that made possible the transmission and reception of signals on a single radar antenna. He also served as a member of the research staff during the atomic tests on the Bikini Atoll.

