

## IN MEMORIAM

**Frederick E. Terman**, vice president and provost emeritus of Stanford University, died in December of heart failure at the age of 82. An important figure in the electronics industry, Terman was an honorary member of the AES.

After Terman received a doctorate from the Massachusetts Institute of Technology, he joined the electrical engineering department in 1925. For the next 40 years he worked as a researcher, teacher, author and administrator. In 1951 at Stanford he encouraged his graduate students to establish themselves in the electronics belt which later became known as "Silicon Valley." Two of those who did were Bill Hewlett and David Packard, founders of Hewlett-Packard Company.

During World War II Terman organized and directed the Radio Research Laboratory at Harvard University. His program developed reconnaissance equipment and devices to foil enemy radar. For his work he was awarded the United States Medal for Merit in 1948.

In 1945 he was named dean of Stanford's School of Engineering. Elected to the National Academy of Sciences in 1946, Terman was also a founding member of the National Academy of Engineering.

Dr. Terman was awarded the National Medal of Sciences by President Ford in 1976 for contributions to the creation of modern electronics.



**Winston Kock**, prominent engineer and scientist, died November 26 at the age of 72 at his home in Ann Arbor, Michigan. He was widely recognized for his work in electron-

ics, lasers and microwaves.

Kock, who held more than 80 patents, earned an international reputation. In 1936 he joined Baldwin Piano and Organ Company where he developed the Baldwin electronic organ for mass production. As a research engineer and director of audio and video systems research at Bell Telephone Laboratories, he developed the microwave lenses used in the company's coast-to-coast microwave relay circuits. He also pioneered development of the prototype of the transistor, of the first picturephone in 1956, and of expanded use of lasers in acoustical holography.

During his career, Kock also worked for Bendix Corporation and for the National Aeronautics and Space Administration as founding director of its Electronics Research Center in Boston. He was educated at the University of Cincinnati where he received degrees in engineering and physics. He later studied at the University of Berlin where he earned a Ph.D. in 1934. He subsequently attended the Institute for Advanced Study at Princeton.

The author of two books, *Sound Waves and Light Waves* and *Lasers and Holography*, Kock also wrote numerous technical papers.

An honorary member of the AES, Kock was the recipient of several awards, among them the Distinguished Public Service Medal, the Navy's highest civilian award. He was a fellow of the IEEE, The American Physical Society, and the Acoustical Society of America.

At the time of his death he was director of the Basic and Applied Science Laboratory and visiting professor of electrical engineering at the University of Cincinnati.