2008 Microwave Career Award

Dr. Rudolf Henning

The Microwave Career Award is presented to recognize a career of meritorious achievement and outstanding technical contribution by an individual in the field of microwave theory and techniques.

Rudy Henning "For a career of leadership, meritorious achievement, creativity, and outstanding contributions in the field of microwave theory and techniques."

Rudy Henning is currently professor emeritus at the University of South Florida. He received the B.S.E.E. degree in 1943, the M.S.E.E. degree in 1947, and the Eng. Sc.D. in 1954, all from Columbia University. Starting with his service as a communications engineer in World War II, Dr. Henning's life has been dedicated to the greater understanding of microwave theory and techniques and helping those around him to aspire to great careers themselves. His initial interest in microwaves and electromagnetic began toward the end of his senior year at Columbia University when an electrical engineering professor was performing research on high power magnetrons as a pulsed power source for radars.

Dr. Henning's early technical achievements were in the field of microwave metrology, with four patents awarded in the 1950s and numerous papers and technical reports. He was involved in the early automation of microwave measurements for antenna and circuit measurements. This work included the broadest bandwidth automated reflectometer measurement equipment of its kind. These and later contributions in microwave measurement technology led in part to his elevation to IEEE Fellow in 1965 and receipt of the ARFTG Automated Measurements Career Award in 1986.

He worked at Sperry Microwave Electronics Division from 1958–1970, becoming chief engineer. His large group of technical professionals earned an international reputation. From 1970 to the present, he has been with the University of South Florida, where he rose to the highest professorial position—distinguished professor. He held during his more than 35 years at the USF positions of department chair and acting dean. He was instrumental in building the USF Center for Wireless and Microwave Information Systems (WAMI) and helped launch the IEEE WAMICON conference held annually in Florida.

Combining his involvement in microwave R&D with active involvement in the IEEE led to his chairing the 1965 National Symposium on Microwave Theory and Techniques. From 1966–1971, Dr. Henning was a member of the MTT-S AdCom and president of the MTT-S in 1968. He served as chair of the 1979 IMS in Orlando and cochair of the 1995 IMS in Orlando. He is currently serving as an advisor for the planning of the 2014 IMS.

Dr. Henning recently received a Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring administered by the NSF. He founded the "YES We Care" program to inspire young minority students to consider careers in engineering and the sciences in the Tampa Bay, Florida, region. Fostering this program, which includes family participation in a 25-week program, for more than two decades, he is in the process of expanding it to include in addition to traditional minorities other students with interest and capabilities in science, technology, engineering, and mathematics.

In addition to being an IEEE Fellow, "for contributions to microwave instruments and measurement techniques," Dr. Henning received in 1996 the MTT-S Distinguished Service Award. He also received recognition as the 1984 IEEE Region 3 Outstanding Student Branch Counselor and in 1984 the IEEE Centennial Medal. In 1992, he received an IEEE United States Activities Board Citation of Honor. He has served for many years on the IMS Technical Program Committee and MTT-S TC 16 (Microwave Systems) and Committee 20 (Wireless Communications).