

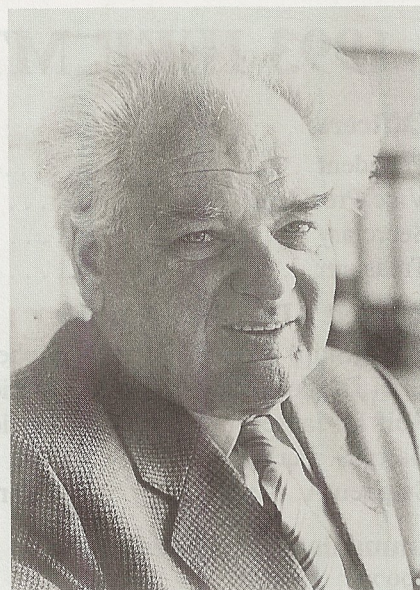
## 1993 Microwave Career Award

The Microwave Career Award is the highest honor bestowed by MTT-S. It recognizes an individual for a lifetime career of meritorious service and technical excellence in our field. In 1993, two individuals will be so honored:

Professor Herbert Döring, Technical University of Aachen, Germany, retired, and Professor Leonard Lewin University of Colorado, retired.

Both individuals had very distinguished teaching careers and have established themselves as world renowned researchers. MTT-S is very proud to have members like Professors Döring and Lewin.

Their Career Award Citation reads: FOR A CAREER OF MERITORIOUS ACHIEVEMENT AND OUTSTANDING CONTRIBUTIONS TO THE FIELD OF MICROWAVE THEORY AND TECHNIQUES.



Herbert K. Döring

**Herbert K. Döring** was born in Vienna, Austria on February 10, 1911. He studied electrical engineering at the Technical University in his native town and received the diploma and the doctorate in 1934 and 1936 respectively.

From 1936 to 1938 he developed broadcast receivers at the Siemens and Halske AG, Vienna. Then he went for three years to the AEG-Research Institute at Berlin where he studied the behavior of electrons in high frequency fields. He could experimentally demonstrate the loss or gain of the average electron velocity in crossed electrical fields depending on the transit time angle. Stimulated by the just published invention of the Klystron, he constructed in 1940 a Klystron-Oscillator giving 100 W at 30 cm; in 1941 he joined the C. Lorenz AG where he continued work on velocity modulated coaxial-line oscillators, at first for fixed frequencies. Subsequently, he developed a tunable coaxial-line-Generator for the lower dm-range.

After the war, he developed radio tubes at C. Lorenz AG. Besides this work, he concluded his habilitation in 1949 at the Technical University of Stuttgart, where he gave lectures on ultra high frequency techniques and on microwave tubes.

At the beginning of 1952 he was appointed Full Professor at the Technical University Aachen, where he founded the Institute of Highfrequency Techniques and where he lectured till 1980. He was Dean of the faculty of mechanical and electrical engineering and later first Dean of the faculty of electrical engineering at the RWTH Aachen. He was visiting professor at the Indian Institute of Technology of Madras/Indien, in Teheran/Iran and also in Beijing and Nanjing/China. A great number of his students have meanwhile obtained high positions in industry and at universities. After his retirement, he works on Gyrotrons and on the history of electron tubes. His interests are, besides his professional field, classic music, mountain climbing, tennis.

Dr. Döring was for 5 years Vice President of the German Research Association (Deutsche Forschungsgemeinschaft) and for 8 years elected surveyor in this organization.

For 2 years he was elected vice president and for the following 2 years, President of the Communication Society in German (Nachrichtentechn. Gesellschaft in the VDE.)

He was regional editor of the Electronics Letters and is a member of the editorial board of the International Journal of Electronics and Communication (AEU).

He also was Kurator of the Physikalisch-Technische Bundesanstalt.

In 1970 he was elected ordinary member of the Rheinisch-Westfälische Academy of Sciences and in 1971 corresponding member of the Austrian Academy of Sciences.

He received the ring of honor of the Verband Deutscher Elektrotechniker (VDE) and the Wilhelm-Exner-Medal from the Austrian Tradesmen's Union.

In 1982 he became Honorary Professor at the Southeast University Nanjing.

He has served in the IEEE Section West Germany and is, since 1974, Fellow of the IEEE.