

1993 Microwave Career Award



Leonard Lewin

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 Doring, 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 Doring and Lewin.

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

Leonard Lewin was born on July 22, 1919 in Essex, England. He graduated from Southend-on-Sea High School in 1937 when he joined the Marconi Wireless Telegraph Company, working on radio and antennas. In 1941 he became an instructor in radio for the British armed forces, and thereafter, joined the Admiralty Signals Establishment as a Temporary Experimental Officer, working on radar and antenna design till the end of World War II. In 1946 he joined the Standard Telecommunication Laboratory as a senior engineer, where he participated in the design of the first linear electron accelerator to 1MeV, and the first British commercial microwave link. In 1950 he became head of the Microwave Department, working on the design of microwave components, antennas and long-haul millimetric waveguide systems. In 1960 he was appointed assistant manager of the Transmission Research Laboratory, and in 1967, after a one-year sabbatical at the University of Colorado at Boulder, he was promoted to the position of Senior Principal Research Engineer.

In 1968 he emigrated to the U.S. and was appointed a professor of electrical engineering at the University of Colorado, becoming Coordinator of the MS Interdisciplinary Program in Telecommunications till his retirement at the end of 1986.

Lewin is the author of some 40 patents and nearly 200 technical publications, including 10 research books on waveguides, on mathematics, and on telecommunications, some of which he co-authored or edited.

He has received two IEE (UK) Premium Awards; and in 1963 the IEEE Microwave Prize and the W. G. Baker award for his pioneering paper on singular integral equation methods of analyzing waveguide structures. In 1967 the University of Colorado awarded him an honorary D.Sc degree, and in 1981 he became a Fulbright Scholar, lecturing in Austria, Turkey and Yugoslavia. He has researched and taught at the Ecole Nationale des Telecommunications in France in 1981 and in 1990, the University of Auckland in New Zealand in 1987, and at the Max-Planck-Institut fur Mathematik in Germany in 1991, where he completed his latest book on the polylogarithm function, a mathematical interest he has pursued throughout his adult life.

Lewin has participated in local chapter activities of the IEEE, and also nationally at MTT symposia and various IEEE sub-committees. He is an IEEE Fellow, a member of the U.S. National Committee of URSI, a Chartered Electrical Engineer (UK), and a Fellow of the British Interplanetary Society. He has reviewed technical papers for a number of journals, and is a consultant to both British and U.S. companies. He is very concerned with social and, in particular, educational matters, and has served on the Accountability Committee and the Advisory Committee for the Talented and Gifted of the local school district. In 1987 he was invited to give the IEEE (New Zealand) National Prestige lecture on the topic of Education, a subject on which he has written a number of articles, particularly as it pertains to the teaching of science and mathematics. He is currently a Professor Emeritus of the College of Engineering and Applied Science at the University of Colorado at Boulder.