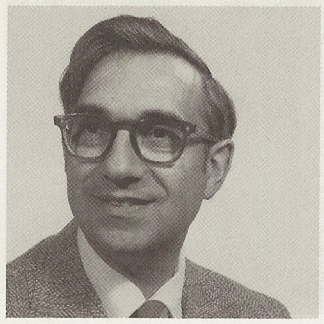
1988 Microwave Career Award

Leo Young



"For a career of meritorious achievement and outstanding technical contributions in the field of microwave theory and techniques."

The Microwave Career Award is the highest award given by the Microwave Theory and Techniques Society. It is given to an individual for a career of meritorious achievement and outstanding technical contribution in the field of microwave theory and techniques. The eligibility requirements are publication in technical journals, presentations of lectures and a distinguished career of contributions to the microwave field. This award is given only to those individuals who have distinguished themselves over a long period of time.

The award consists of a suitable certificate, a plaque, a cash sum of two thousand dollars and a feature publication in the **IEEE Transactions on Microwave Theory and Techniques.**

Leo Young came to the United States from England in 1953, to join the Westinghouse Electric Corporation in Baltimore, Maryland.

Leo had been trained as a physicist at Cambridge University, England, where he also attended a few courses in electronics. He had become excited by the new field of microwaves which had recently proved so important in winning the war. He turned his attention to the latest applications of radar and began to design antennas and waveguides in the research laboratories of A. C. Cossor and Decca Radar in London. The MIT Rad. Lab. series of books were just being published and each one was awaited eagerly by the small microwave community. The latest developments were still coming from the U.S., and so he set sail from Southampton with his new bride to continue his research here.

Westinghouse encouraged its engineers to continue their academic education, and Leo was fortunate in having his first American course on antennas given by the late Don King at The Johns Hopkins University, where he also studied microwave networks under Bill Huggins. He received the Westinghouse Electric Corporation's B.G. Lamme Graduate Scholarship in 1958, and the Doctor of Engineering degree from Johns Hopkins in 1959. His dissertation kindled his interest in microwave and optical filters, and a year later he joined Seymour Cohn, George Matthaei, Ted Jones and others at Stanford Research Institute in Menlo Park, California, to continue this work and co-author a book on microwave filters, then in the planning stage. He remained at SRI for more than twelve years, and during that time became active in the Microwave Theory and Techniques (MTT) Group (now Society) of IEEE, receiving the Microwave Prize in 1963 (right here in New York just 25 years ago). He was elected IEEE Fellow in 1968, became Chairman of the MTT Administrative Committee in 1969, and Director of Division IV on the IEEE Board of Directors from 1971 to 1974.

The MTT Group (Society) has always shown a strong interest in professional activities, and Leo carried that message to the IEEE Board, helping in 1972 and 1973 to institutionalize a framework of professional activities within the largest engineering society in the world. He became chairman of the new United States Activities Committee (later, USAB) in 1974. He continued to take a specific interest in IEEE pension activities, and remained chairman of the IEEE Pension Committee under USAB from 1974–1978. During that period, and as a result of these IEEE activities, he co-authored with his late wife, Fay, a popular book on pension plans. He was elected in 1979, Executive Vice-President of IEEE, and (by petition) in 1980, IEEE President.

In 1973 he joined the U.S. Naval Research Laboratory (NRL) in Washington, D.C. where he remained until 1981, at which time he came to the Office of Secretary of Defense (OSD) as Director for Research and Laboratory Management. At NRL he continued to work in microwaves and electronics, and played an advocacy role for millimeter waves. At OSD, Leo has had responsibility for basic research, university relations, and laboratory management policy, set up under the direction of Under Secretary Richard DeLauer, the DoD-University Forum to improve the quality of the dialog with universities, organized the DoD Small Business Innovation Research program, chaired the IR&D Technical Evaluation Group, provided oversight to the Defense Technical Information Center, and has had many other assignments. His current interests are mainly in the area of technology transfer, design and manufacturing processes, and computer aided logistics support.

Leo was married in Sunderland, England, in January 1953, to Fay Lilian Merskey, who passed away in May 1981. They had three children, Philip, an economist, Sarah, a computer scientist, and Joe, a medical student. In 1983 Leo married Ruth Breslow, also widowed and with three grown children. They had lived only a few miles apart for many years, but never met until introduced through an IEEE connection.

Leo has authored or edited fourteen books, mainly on microwave subjects, and about one hundred papers, holds over twenty patents, is an honorary life member of the Microwave Theory and Techniques Society, was a member of the Board of Governors of the American Association of Engineering Societies, is a Fellow of the American Association for the Advancement of Science, has served on numerous Committees of the National Academy of Sciences and National Academy of Engineering, was chairman of NSF's first Engineering Advisory Committee, and has served on committees of NASA, OSTP, and several universities (Johns Hopkins, University of California, MIT). He has traveled extensively abroad, spent a Sabbatical year at the Technion in Haifa, Israel, was Distinguished Microwave Lecturer at the IEEE summer school at Leeds University, England, NATO/AGARD lecturer at the University of Bologna, Italy, and has given talks at universities in India, Egypt, Europe, as well as in the United States. He believes that the way to peace and prosperity is through education and the scientific disciplines, particularly the professional application of engineering knowledge, which is so well exemplified by the members and charter of IEEE.