## 1998 MICROWAVE CAREER AWARD

## Dr. Harold Sobol

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 the field. Our honored recipient is Dr. Harold Sobol, an internationally recognized independent consultant for microwave passive components and an IEEE Fellow.

The award consists of a plaque, a certificate, and an honorarium of \$2,000. The Career Award Citation reads: "FOR A CAREER OF LEADERSHIP, MERITORIOUS ACHIEVEMENT, CREATIVITY AND OUTSTANDING CONTRIBUTIONS IN THE FIELD OF MICROWAVE THEORY ABD TECHNIQUES."

**Harold Sobol** (M'59-SM'69-F'73-LF'94) received the BSEE from the City College of New York in 1952, and the MSE and Ph.D. from the University of Michigan in 1956 and 1960 respectively.

Dr. Sobol joined the IBM T. J. Watson Research Center, Yorktown Heights NY, in 1960 and conducted research on the application of thin film superconductors for high-speed computers. This work keyed his later interests in planar microwave circuits and solid state devices.

He joined RCA Laboratories, Princeton NJ, in 1962 to do research on microwave power tubes and plasmas. In 1963 he started the Microwave Integrated Circuits group and led the development of a wide range of thin film microstrip and lumped element circuits and functions, microstrip circulators, and solid state devices. The initial work at RCA concentrated on hybrid circuits but the groundwork for future monolithic circuits was established. This work in the early 1960's, in conjunction with efforts at TI and Microwave Associates, led to the establishment of major efforts in the area in the world wide microwave



industry. After spending two years in the RCA Solid State Division transferring technology to manufacturing, Sobol returned to RCA Laboratories to head up the development activity on microwave power GaAs FETs, TRAPATT diodes, millimeter wave IMPATTS, and served as a consultant in the introduction of electronic tuning in RCA XL 100 TV receivers.

Dr. Sobol moved to Collins Radio, Dallas TX, in 1973 to become Director of Engineering of the Microwave Systems Division. In 1974 after Collins was acquired by Rockwell International, he began a major expansion of the product line to include microwave analog FM and SSB radios, high capacity digital radios, and high capacity fiber optic transmission systems. The division grew to be a worldwide leader and was the first to introduce commercial high capacity 8PSK and 64QAM microwave digital radios and gigabit fiber optic systems. Dr. Sobol was promoted to Vice President Engineering and Advanced Technology for Rockwell Telecommunications in 1985.

Dr. Sobol retired from Rockwell in 1988 to fulfill a long time goal of returning to academia and joined the University of Texas at Arlington as Professor of Electrical Engineering and Associate Dean for Research of the Engineering College. He started a graduate track in telecommunications, currently the major activity area in EE. Dr Sobol retired from full time activities at the university in 1993 but still serves part time at the university and as a consultant to industry.

Dr. Sobol has served on numerous IEEE Institute and Society committees. He was the general chairman of three major conferences, a member of the MTT-S IMS TPC for nearly 30 years, an elected member of MTT-S AdCom for 8 years and President in 1978. He has served numerous functions since his presidency and continues to serve at the current time.

Dr. Sobol has received many honors including IEEE Fellow, IEEE Centennial Medal, MTT-S Distinguished Service Award, 1970 MTT-S National Lecturer, 1986 IMS Best Presented Paper Award, IEEE Dallas Section Outstanding Engineer Award, Industrial Research IR-100 Award, and the Distinguished Service to Engineering Award from the University of Texas at Arlington.