1998 N. WALTER COX AWARD

Dr. Roger Kaul

The N. Walter Cox Award has been established in recognition of the qualities of N. Walter Cox and his service to the MTT Society prior to his untimely death in 1988. It is given aperiodically to a Society Volunteer whose efforts on behalf of MTT-S best exemplify his spirit and dedication.

This year’s recipient is Dr. Roger Kaul. The citation reads: “FOR EXEMPLARY SERVICE, GIVEN IN A SPIRIT OF SELFLESS DEDICATION AND COOPERATION.”

Roger Kaul (S’60, M’62, M’73, SM’88) is a Senior Electronics Engineer at the Army Research Laboratory (formerly Harry Diamond Laboratories) in Adelphi, MD. For the last decades he has developed microwave hardening technology for DoD systems to protect them from high-power microwave sources. His primary contribution is the development of GaAs monolithic microwave integrated circuit limiters that are compatible with the sensitive devices that they protect. In phased-array radar applications, these limiters offer significant cost savings, because they are fabricated with the same technology as the radar’s front end circuitry. Because most of his work is considered U.S. sensitive technology, the results have not been available to MTT-S, but have been published elsewhere.

Previously, Dr. Kaul worked for Litton Amecom, College Park, MD, and developed components for electronic surveillance receivers and millimeter-wave communication systems. Before that, he worked for ORI, Inc., Silver Spring, MD, in the design of systems for NASA’s Space Shuttle and satellite communication and astronomy payloads. His first employer was United Aircraft Research Laboratory, East Hartford, CT, where he researched the device-circuit interactions of Gunn and IMPATT devices. He received his BSEE (1962) and MSEE (1964) degrees from Case Institute of Technology and his Ph.D. degree (1969) from Case Western Reserve University in Cleveland OH. Dr. Kaul coedited a textbook Microwave Engineering and Systems Applications (John Wiley & Sons, New York, 1988) for teaching engineers and engineering technologists the microwave art. He has three patents and over a dozen IEEE publications. He currently teaches a microwave systems and components course and conducts a wireless communication circuits laboratory at The Johns Hopkins University in Dorsey, MD.

Dr. Kaul has been very active for the past 23 years in the Washington DC/Northern Virginia Chapter of MTT-S. During this time he has been Program Co-Chair (1975-77), Secretary (1977-78), Vice Chair (1978-79), and Chair (1979-80). Since 1980, he has been involved with many Chapter activities; these include publicity, speaker coordination, program planning, officer nominations, and other activities. In 1987, he was co-organizer of the 30th anniversary celebration for the Chapter and is helping to organize the 40th anniversary celebration to be held in conjunction with the 1998 International Microwave Symposium. In 1987-88, Dr. Kaul was a leader in the Washington Microwave Education Committee (along with Warren Cooper, Al Friend, Bob Garver, and Ed Wolf). The committee developed microwave courses at three local universities and compiled the textbook noted earlier.

Dr. Kaul has also been a supportive member of the MTT-S Technical Committee on Microwave Systems (MTT-16) since 1979. In recent years he organized a workshop (1995) and a symposium special session (1996) on microwave chaos, and a special session (1997) on microwave applications of SiC.

Since 1972, Dr. Kaul has attended all but one international microwave symposium. He was Publicity Co-Chair of the 1980 International Microwave Symposium in Washington, DC, and is Vice Chair of the 1998 International Microwave Symposium sponsored by the Baltimore and Washington DC/Northern Virginia Chapters of MTT-S.