2002 Microwave Career Award

Ingo Wolff

The MTT-Society’s 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. This year’s recipient is Ingo Wolff, whose citation reads: “For A Career Of Leadership, Meritorious Achievement, Creativity And Outstanding Contributions In The Field Of Microwave Theory And Techniques”.

Ingo Wolff (SM’82, F’88) was born 1938 in Köslin, Germany. After school time from 1945 to 1956 he studied Electrical Engineering at the Technical University Aachen, Germany. He concentrated his study on communication techniques and high frequency techniques and soon focused on electromagnetic field theory. He finished his studies at the Technical University in Aachen in 1964 by receiving the Diplom-Engineer (Dipl.-Ing.) degree.

After his studies he remained at the Technical University Aachen in the Institute of High Frequency Techniques. He investigated ferrite materials and their applications at millimeter wave frequencies (140 GHz). His dissertation: "Material Parameter Measurements of Ferrite Materials at Millimeter Wave Frequencies Using Dynamical Modes in Spherical Resonators," was awarded the Springorum plaque for an excellent dissertation from the Technical University Aachen, and he received the Dr.-Ing. Degree in 1967.

Ingo Wolff married in 1967, and has two daughters, Stephanie and Melanie. In 1970 he received the "Habilitation" degree in High Frequency Techniques from the Technical University Aachen for his scientific work and book Fields and Waves in Gyrotropic Microwave Structures. The book was awarded the NTG Award of the VDE, the German Association of Electrical Engineers. In 1974 he was nominated to a full professor of Electromagnetic Field Theory at the Duisburg University, a position that he still holds today.

Over more than 27 years Ingo Wolff headed research work in the area of numerical electromagnetic field calculation and simulation and its application to the design of planar microwave circuits and antennas. He published 10 books and about 400 scientific papers, a great many of which appeared in the IEEE Transactions on Microwave Theory and Techniques.

In 1987 he founded and subsequently led, until 1991, a special research activity (Sonderforschungsbereich) on III-V-semiconductor circuits at Duisburg. This group of nearly 80 scientists investigated monolithic microwave circuits; his own research work during this time was in the area of coplanar microwave circuit design. In this research group, 40 students received their doctoral degree under Wolff. He was awarded the Heinrich Hertz Award of the University Karlsruhe, Germany in 1998.

Wolff is a member of MTT-1: Computer-Aided Design, and MTT-15: Microwave Field Theory. For many years he was a member of the Technical Program Committee of the IMS and he organized and chaired various sessions and workshops of the IMS. In 1999 he received a certificate of recognition from the MTT-S for these activities.

In 1983 Wolff started a second career parallel to his professorship at the university. He founded a publishing company and bookshop, specialized on technical literature and microwave software development. In 1987 he founded the Argumens GmbH, a company on microwave measurement techniques and technology. Finally in 1991 he founded the IMST GmbH, an organization known worldwide for its achievements in industrial R&D in mobile and satellite communication, mobile Internet technologies and hardware development for GSM and UMTS systems. He also still runs the publishing company and meanwhile an additional bookshop and Internet bookshop in the town of Aachen, Germany.

In 1999 Wolff was elected president of the Duisburg University. In 2002, Prof. Wolff will return to research in the area of microwave theory and techniques.