

1986

Microwave Career Award



George L. Matthaei

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

George L. Matthaei was born August 28, 1923, in Tacoma Washington. He received the B.S. degree in 1948 from the University of Washington. His college education was interrupted by three years of military service before he received his bachelors degree. He obtained an MS Degree in 1949, and a Ph.D. in 1952 in electrical engineering from Stanford University. He was a Research Assistant in Stanford's Electronic Research Laboratory from 1949 to 1951.

From 1951 to 1955 Dr. Matthaei was first an instructor and then Assistant Professor in the Division of Electrical Engineering at the University of California Berkeley. His specialty was network synthesis. He was on the Technical Staff of the Ramo-Wooldridge Corporation from 1955 to 1959 where he was engaged in system analysis and research in microwave components. In 1958 he joined Stanford Research Institute where he conducted research on microwave devices. He served as a Project Leader, and in 1962 became Manager of the Electromagnetic Techniques Laboratory of SRI. While at SRI he taught part-time at Stanford University. In July 1964, Dr. Matthaei joined the Department of Electrical Engineering of the University of California at Santa Barbara where he is a Professor.

Dr. Matthaei's professional specialties are microwave and acoustic devices and network synthesis. He is currently doing research in the area of millimeter-wave integrated circuits. He has published approximately eighty articles on his research in the area of network synthesis, wide-band impedance-matching structures, microwave filters, parametric amplifiers, quasi-optical filters, acoustic bulk-wave and surface-wave devices, and most recently dielectric-waveguide filter and coupler techniques for mm-wave and optical integrated circuit applications.

In 1961, Dr. Matthaei was awarded the Microwave Prize for his paper "A study of the Optimum Design of Wide-Band Parametric Amplifiers and Up-Converters." He is coauthor or contributor to six books. The most widely known of these is *Microwave Filters, Impedance-Matching Networks and Coupling Structures*, which is coauthored with L. Young and E. M. T. Jones.

Dr. Matthaei is a Fellow of the IEEE and a member of MTT-S, AP-S, Sonics and Ultrasonics, Sigma XI, and Tau Beta Pi. He has served a term on the Administrative Committee (AdCom) of the MTT-S and also on the AdCom of Circuit Theory. He is on the Editorial Board for the *IEEE Transactions on Microwave Theory and Techniques* and the journal, *Wave Electronics*. Dr. Matthaei received an IEEE Centennial Medal at the 1984 International Microwave Symposium in San Francisco.