

## Editor's Overview

**T**HIS ISSUE of the TRANSACTIONS presents a synopsis of the 1977 International Microwave Symposium. While the *Symposium Digest* gives in entirety the 152 papers, a few papers were selected for expansion and are contained herein. Also included is a resume of the Symposium functions, including the technical program, exhibits, social programs, and members of the Steering and Program Committees. Special attention is given to those we honored at the awards banquet.

This year the Symposium theme was "Accent on Applications." The Technical Program's intent was to translate that theme into useful concepts for the majority of practicing microwave engineers. Most papers were concerned with new concepts reduced to practice. Fields included within the program were solid state sources, frequency converters, MIC, FET devices and circuits, low noise, measurements, multifunction modules, computer aided design, microwave systems, filters and passive components, ferrites, transmission lines, antennas, acoustics, optics, high power, solid state developments in Japan, and cancer treatment with microwaves. Papers were presented from all over the world, and,

therefore, the international flavor of the microwave meeting was again reflected.

It appears that the 1977 Symposium was a success. A record registration of 810 attests to this. The members of the Symposium Committee trust that the attendees found the Symposium rewarding in spite of the sometimes crowded, warm conditions. For the unfortunate ones not able to attend, it is hoped that this Special Issue of the TRANSACTIONS will give a portion of the technology presented. It is recommended, however, that the *Symposium Digest* be obtained also because it contains the entire technical program which was five times more extensive than what is presented herein.

My thanks are extended to the authors, chairmen, organizers, reviewers, Technical Program Committee, Local Committee people who donated many hours helping put together the program and this issue, and lastly, to my wife Arlene, who persevered throughout this effort while chairing the family program.

G. SCHAFFNER  
Guest Editor



**G. Schaffner** (S'48-A'50-M'51-SM'59) was born in Chicago, IL. He received the B.S.E.E. and M.S.E.E. degrees from Purdue University, Lafayette, IN, in 1949 and 1950 and the Ph.D. degree in electrical engineering from Northwestern University, Evanston, IL, in 1956.

From 1950 to 1951 he was with Thordarson Electric designing transformers. He joined Stewart-Warner in 1951 staying until 1957. At Stewart-Warner he headed the RF laboratory designing microwave components for radar beacons. From 1957 to 1969 he was with Motorola in Phoenix, AZ, working in a variety of positions. He was a group leader developing microwave test systems for radar and radar beacons. He then headed a research and development group working on parametric and tunnel diode amplifiers. In 1963 he joined the Motorola Semiconductor Division as Applications Manager for varactor diodes; he subsequently assumed operations responsibility of the microwave device department. During his tenure, step recovery and tuning diodes were introduced covering VHF through X band. Development of MIC was also undertaken at Motorola. In 1969 he joined Teledyne Ryan in San Diego as Senior Group Engineer for Microwave and Microelectronic systems. Work within his group included development of IMPATT oscillators, pin diode switches, back diode mixer circuits, FET amplifiers, antenna and hybrid circuits for Ku band Doppler Radars, and L and C band altimeters. He is the author of numerous papers on solid state devices and applications, computer aided design, and microwave integrated circuits. He also has four patents in these fields.

Dr. Schaffner is a member of the IEEE S-MTT, G-ED groups, and ISHM. He has served as vice chairman and chairman of the Phoenix and San Diego MTT chapters. He currently has the Chairmanship of the San Diego Chapter.