

Editors' Overview

THIS ISSUE includes a sampling of papers presented at the 1982 IEEE MTT-S International Microwave Symposium. These papers are expanded versions of the Symposium presentations, published to provide substantially more information than originally appeared in the *Symposium Digest*. In this issue we have provided a listing of all the papers presented at the Symposium by publishing the Table of Contents from the *Symposium Digest*. Also included are articles highlighting the 1982 International Microwave Symposium and recognizing the winners of the 1981 Microwave Theory and Techniques Society Awards.

Our Symposium had as its theme, "Thirty Years of Microwaves," commemorating the birth of the Microwave Theory and Techniques Society in 1952. In addition to the 168 technical papers presented at the Symposium, emphasis on the evolution of today's technological achievements was explained in the Keynote Session and shown in the Historical Exhibit.

The international flavor of the Symposium was reflected by the inclusion of papers from fifteen nations. Similarly,

this issue is international in content, reflecting the worldwide interest in microwave theory and techniques. This issue contains papers on a variety of different transmission media, monolithic microwave circuits, measurement techniques, millimeter-wave solid-state technology, and network theory.

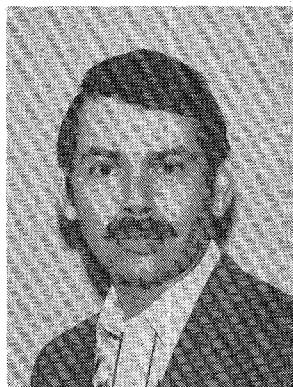
We wish to express our appreciation to all of the reviewers for their time, their constructive comments, and their assistance in the preparation of this issue. Furthermore, we also wish to thank the authors, the Technical Program Committee members, and the session chairman for their efforts in formulating the technical content of the Symposium. Finally, we would like to acknowledge the support and assistance provided by the Symposium Steering Committee.

JEROME K. BUTLER
STEVEN L. MARCH
Guest Editors



Jerome K. Butler (S'59-M'65-SM'78) received the B.S. degree from Louisiana Polytechnic University, Ruston, in 1960, and the M.S. and Ph.D. degrees from the University of Kansas, Lawrence, in 1962 and 1965, respectively. From 1960 to 1965 he was a Research Assistant at the Center for Research in Engineering Sciences, University of Kansas, Lawrence. His research was related to electromagnetic-wave propagation and to the optimization and synthesis techniques of antenna arrays. In 1965 he joined the staff of the School of Engineering and Applied Science, Southern Methodist University, Dallas, TX, where he is now Professor of Electrical Engineering. His primary research areas are solid-state injection lasers, radiation and detection studies of lasers, communication and imaging systems, integrated optics and the application of integrated optical circuits, and quantum electronics. In the summer from 1969 to 1982 he was a member of the Technical Staff, RCA Laboratories, Princeton, NJ, where he did research concerned with electromagnetic-wave propagation in solid-state injection lasers. Dr. Butler is coauthor of the book *Semiconductor Lasers and Heterojunction LED's* (New York: Academic). He has held consulting appointments with the Central Research Laboratory, Texas Instruments, Inc., the Geotechnical Corporation of Teledyne, Inc., Earl Cullum Associates, Dallas, TX, and the University of California Los Alamos Scientific Laboratory.

Dr. Butler is a member of Sigma Xi, Tau Beta Pi, Eta Kappa Nu, and is a Registered Professional Engineer in the State of Texas.



Steven L. March (M'65) received the B.E.E. degree from Rensselaer Polytechnic Institute, Troy, NY, in 1965, and a masters in electrophysics from the Polytechnic Institute of Brooklyn, NY, in 1970.

Upon graduation from RPI, Mr. March joined HRB-Singer, Inc., where he was responsible for the design of broad-band active and passive stripline components for ECM and ELINT receivers. He was later employed at Microphase Corp., Cos Cob, CT, and Microwave Associates, Burlington, MA, where he performed research, design, and development of MIC components. Mr. March served as Engineering Manager for Microwave Acoustic Wave Device Development at Andersen Laboratories, Bloomfield, CT, and as Program Manager for various military communications and navigational systems at ASC Systems Corp., Rockville, CT. He was later employed by E-Systems, Inc., Garland, TX, as an Engineering Specialist in the Special Projects Department, responsible for research and development of MIC and SAW devices for receiver applications. In January 1981, Mr.

March joined the Compact Engineering Division of Compact General Integrated Systems as Southern Regional Manager, responsible for the development of new software for the computer-aided design of microwave circuits. His current position is Director of Microwave Graphic Products Development.

Mr. March is a member of the IEEE Microwave Theory and Techniques Society and the Computer Society. He served the Dallas Section of the IEEE as Administrative Vice-Chairman in 1979-80 and as Treasurer in 1980-81. He served on the Technical Program Committees for the 1973 and 1979 through 1981 International Microwave Symposia and as Co-Chairman for the Technical Program Committee for the 1982 IEEE MTT-S International Microwave Symposium. Mr. March is currently an elected member of the MTT Society Administrative Committee, a member of the Editorial Review Board of *Microwave Journal*, *Microwave Systems News*, and the MTT TRANSACTIONS, a Contributing Editor to *Microwaves Magazine*, and Editor of the MTT Society Newsletter. Mr. March has published nine papers relating to microwave technology and has presented four at national or international conferences. In 1980, he was the recipient of the Outstanding Achievement Award in Electrical Engineering, Dallas Section, IEEE.