

Guest Editors' Overview

THIS Special Issue of the TRANSACTIONS contains expanded versions of papers that were presented at the 1993 International Microwave Symposium (IMS) and the Microwave and Millimeter-Wave Monolithic Circuits Symposium (MMWMCS) held in Atlanta, Georgia. The 41 IMS and 5 MMWMCS papers were selected from the 92 IMS and 10 MMWMCS papers submitted for publication in this issue. The acceptance rate for the submitted papers was largely dictated by the page allocation set for the issue. A number of papers were rejected because the reviewers suggested substantial revision, and the publication deadline did not allow sufficient time for a second review. The authors of these papers were encouraged to revise and resubmit their papers for publication in a regular issue of the TRANSACTIONS.

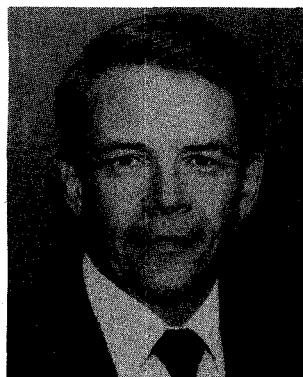
The IMS was held in Atlanta nineteen years ago (1974). It is interesting to compare the Special Issue from that Symposium with the current volume. The 1974 issue contained 22 full papers and 17 short papers, whereas the current issue contains 46 full papers. The advances in technology are particularly evident; for example, integrated circuits and CAD techniques are practically absent from the 1974 issue but are the subjects for several papers in the current issue. The international makeup of the Society in recent years is also clearly evident. Only nine of the 39 papers (23%) in 1974 had a first author from an

institution outside the USA, whereas 21 of the 46 papers (46%) now fall into this category.

We want to express our appreciation to the reviewers (listed below) for their efforts. Each of the IMS papers was sent to three reviewers; no reviewer was sent more than one paper, thus, over 270 individuals were contacted. Over 80% of those asked, responded with a review in time for use in the editorial process. Of the 29 individuals asked to review MMWMCS papers, all but one responded in time with a review. These numbers clearly indicate the cooperation and support of the microwave community in the preparation of this issue.

The preparation of this Special Issue requires a large amount of timely correspondence with the authors and reviewers, a task that is made much more enjoyable with the help of an outstanding secretary. In this regard, the IMS Guest Editor would like to thank his secretary, Sherry McElwain, for her exceptional effort during the preparation of this Special Issue. Finally, the MMWMCS Guest Editor gives special thanks to Linda Blankenship for her help in the review process.

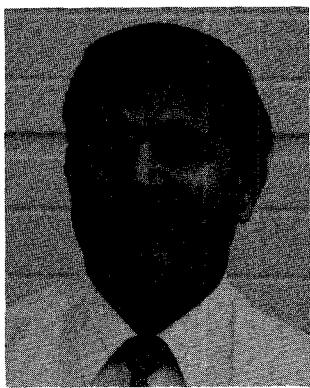
GLENN S. SMITH
IMS Guest Editor
 INDER BAHL
MMWMCS Guest Editor



Glenn S. Smith (S'65-M'72-SM'80-F'86) was born in Salem, MA, on June 1, 1945. He received the B.S.E.E. degree from Tufts University, Medford, MA, in 1967 and the S.M. and Ph.D. degrees in applied physics from Harvard University, Cambridge, MA, in 1968 and 1972, respectively.

From 1972 to 1975 he served as a Postdoctoral Research Fellow at Harvard University and also as a part-time Research Associate and Instructor at Northeastern University, Boston, MA. In 1975, he joined the faculty of the Georgia Institute of Technology, Atlanta, GA, where he is currently Regents' Professor of Electrical Engineering.

Dr. Smith is co-author of the book, *Antennas in Matter: Fundamentals, Theory and Applications* (MIT Press), and he contributed the chapter on loop antennas to the *Antenna Engineering Handbook* (McGraw-Hill).



Inder J. Bahl (F'89) was born in India on January 27, 1944. He received the B.S. degree from Punjab University, India, in 1965, the M.S. degrees in physics and electronics engineering from Birla Institute of Technology and Science, Pilani, India, in 1967 and 1969, respectively. In 1975, he received the Ph.D. degree in electrical engineering from the India Institute of Technology (IIT), Kanpur, India.

From 1969 to 1974, he was a Senior Research Assistant, at IIT Kanpur. From 1974 to 1978, he was with the Advanced Centre for Electronic Systems as a Research Engineer, where he was engaged in research on pin diode phase shifters, microwave integrated circuits, and printed antennas. From 1979 to 1981, he was a research associate at the University of Ottawa, Ottawa, Canada. Prior to joining ITT in 1981, he spent five months at the Defense Research Establishment, Ottawa, Canada, working as a research scientist on millimeter-wave systems. At ITT GTC, in his present capacity as an Executive Scientist, he is responsible for providing directions in the development of

device models and GaAs MMIC's.

Dr. Bahl is the author/co-author of over 120 research papers. He authored/co-authored four books: *Microstrip Lines and Slotlines* (Artech House), *Microstrip Antennas* (Artech House), *Millimeter Wave Engineering and Applications* (John Wiley), and *Microwave Solid State Circuit Design* (John Wiley), and co-edited the book on *Microwave and Millimeter-Wave Heterostructure Transistors and Their Applications* (Artech House). He also contributed two chapters to the *Handbook of Microwave and Optical Components* (John Wiley) and one chapter to the *Handbook of Electrical Engineering* (CRC Press). He holds eight patents in the areas of microstrip antennas and microwave circuits. He is a member of the Electromagnetic Academy.