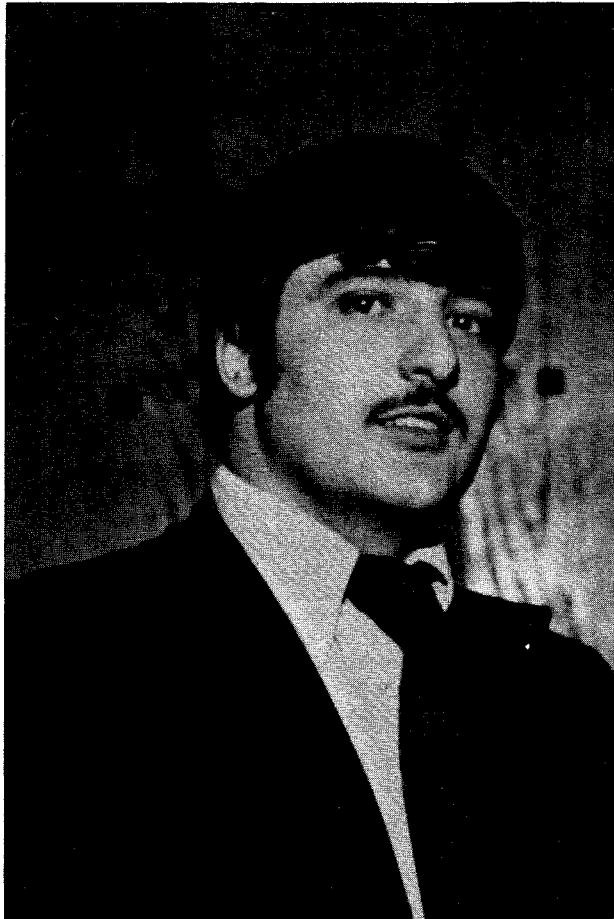


## FOREWORD

On behalf of the 1976 MTT Steering Committee it gives me great pleasure welcoming you to Cherry Hill, New Jersey and the 1976 International Microwave Symposium. It is our hope that your stay will be technically stimulating and socially enjoyable, and in this regards, we solicit your comments on how we can make your stay an unequaled success.

The technical program consists of over 110 papers and 24 technical sessions which includes many contributions from the international community. These contributions originated in Japan, England, Germany, France, Canada, Italy and the Netherlands emphasizing again the truly international nature of the Symposium. The contributors (authors/panelists) represent 24 Universities, 17 government agencies, 32 major Microwave firms and 9 R & D Laboratories. This, we feel, is an excellent cross section of the microwave community. Our highly concentrated technical program required 4 parallel sessions on two occasions and 3 parallel sessions for the remainder of the conference. Exceptions to this parallel session format have been made for session 1, (Integrated/Fiber Optics), which is a relatively new topic to the microwave community and session 17 (Survey of Microwave Marketing), which will be of general interest to the Symposium attendees. The technical program has been supplemented by exhibitors from many leading microwave firms featuring many of the latest microwave product developments. The keynote address will be presented by Pete Rodrigue, MTT ADCOM Chairman.

This is the first time our Symposium has been held in the pleasant New Jersey countryside. With its close proximity to Philadelphia, many of the cultural and recreational facilities of Philadelphia during America's Bicentennial will be accessible to the Symposium attendees. A complete daytime social program for the benefit of the wives of Symposium attendees has been organized. Highlighting our Symposium, an exciting banquet will be held in the lovely Starlite room of the Cherry Hill Inn. The banquet speaker is Dr. William B. Lenoir, NASA astronaut and current leader of NASA's Powersat program. Dr. Lenoir's talk is centered around his role as astronaut and task leader for advanced energy concepts. The banquet is supplemented by a number of awards presented to individuals for outstanding contributions to the Microwave Field. Dr. Henry J. Riblet was named 1975 recipient of the MTT Microwave Career Award for a "Career of meritorious achievement and outstanding technical contribution in the field of microwave theory and techniques." The Microwave Prize was awarded to Drs. T. E. Rozzi and Wolfgang F. G. Mecklenbrauker for their paper "Wide-band Network



Modeling of Interacting Inductive Irises and Steps." The 1975 Microwave Application Award will be received by Joseph F. White for "The development of practical high-power PIN diode phase shifters utilized in various phased array radars." Dr. R. W. Beatty will be presented the 1975 MTT National Lecturer's Plaque for his lecture "The Development of Modern Automatic Systems for the Measurement of Network Parameters." The Past President's Pin for serving as President of the MTT during 1975 will be presented to H.W. Cooper.

Finally, I would like to express my appreciation to members of the Steering and Technical Program Committees for their contributions in time and effort without which the Symposium could not have taken place. These individuals, to which we all owe our thanks, are listed in the digest along with the Microwave firms and journals which helped financially support the Symposium.

Bernard DeMarinis  
Steering Committee Chairman

As Editor of this Digest, I wish to express my appreciation to my colleagues of the Department of Electrical Engineering at Lehigh University for their patience, to Mrs. E. Horvath for her devotion to this extra work and to all the authors whose splendid cooperation made my task easier.

Nikolai Eberhardt