

# Introduction

**T**HIS SPECIAL ISSUE of the IEEE TRANSACTIONS OF MICROWAVE THEORY AND TECHNIQUES, "Historical Perspectives of Microwave Technology," has been published to help commemorate the 100th anniversary of the IEEE.

In planning the issue, guidance was solicited from a number of members of the MTT-S Administrative Committee and other distinguished members of the microwave community by means of a questionnaire that was circulated. The questionnaire included a tentative outline, along with a list of possible authors for each section of the outline. Constructive inputs were received from over 30 individuals. On the basis of their inputs and further conversations with others, a final outline was prepared which roughly corresponds to the contents of this book. With that outline, the designated authors were then solicited for specific subjects. With only a few exceptions, they agreed to participate in what has been a tremendous project.

General, but not rigid guidelines were then sent to each author. They were urged to examine the July 1976 issue of the IEEE TRANSACTIONS ON ELECTRON DEVICES. That was an outstanding Special Issue devoted to "Historical Notes on Important Tubes and Semiconductor Devices." It was made up of 20 papers prepared by the inventors of the most important devices in the fields of tubes and semiconductors. Some of our authors chose to follow that format, others chose to use their own style. What you will find here

is a collection of papers presented by individuals who are active in the field that they are writing about, and, in some instances, are the key individuals in that field.

I have chosen to title this publication "Historical Perspectives of Microwave Technology" because, at best, it's only a beginning. Many of the authors felt that there was more work that they would like to do, and some of them were actually planning to go further in their investigations.

This has been a unique publication for MTT-S. A number of people deserve credit for what I hope you will agree is a worthwhile result. First, there is Reinhard Knerr, who caught me at a weak moment and asked me to take on the project. Then, there is Tatsuo Itoh, who has kept his watchful eye on my progress. There are the 30 individuals who responded to my questionnaire and who were so helpful in their suggestions, both as to content and as to authors. I owe special thanks to John Bryant, Marion Hines, Art Oliner, and Joe White for the conversations I had with them that helped me to understand the scope and the importance of this project. I would also like to thank Bill Hagen at IEEE Headquarters, who has been so cooperative throughout. But most important, I would like to thank the authors who gave so willingly of their time and their precious memories.

THEODORE S. SAAD  
*Guest Editor*