

Foreword

It has been my pleasure over the last year to be intensively involved with the birth of a new technical event: the annual Microwave and Millimeter-Wave Monolithic Circuits Symposium to be held in conjunction with the IEEE MTT-S International Microwave Symposium. To even the most casual observer it has been obvious that monolithic microwave and millimeter-wave circuits are a quantum leap in the state of the art and whose impact will truly be profound in the technical sense. To date representation and reporting of the art has been fragmentary in that isolated papers imbedded in unrelated work have been the norm. The ground swell of late has been to feature entire technical sessions and/or evening panel sessions. Obviously, a symposium aimed at the practitioner was the next evolutionary step.

The microwave/millimeter technical community today stands on the doorstep of a technological breakthrough (via the reduction to application of the monolithic circuit art) that will dwarf the impact of hybrid microwave IC's during the 1960's. If attendance at the conference was a

figure of merit then the microwave/millimeter wave community must enjoy the same optimism as the founders of this Symposium, for attendance by far exceeded wildest expectations. The Symposium was held in a workshop format and 16 papers were presented representing United States, Asian, and European research. The papers that follow are a subset of those presented at the Symposium which have been expanded to full length presentations. I would sincerely like to thank the members of the Steering Committee for their help in reviewing the papers on very short notice. Also, I would like to thank R. Gilson and N. Zellermeier for their personal and enthusiastic help in the logistics of the review process. I am very enthusiastic regarding the growth of this Symposium and look to the technical community at large for suggestions to improve it.

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Guest Editor



Vladimir G. Gelnovatch (M'63-SM'69-F'82) was born in New York City, NY, in 1938. He received the B.S. degree in electronic engineering from Monmouth College, West Long Branch, NJ, in 1963 and the M.S. degree in electrical engineering from New York University, NY, in 1966.

Since 1963, he has been employed by the U.S. Army Electronics Research and Development Command, Electronics Technology and Devices Laboratory, Fort Monmouth, NJ. During this time he has worked in the area of microwave solid-state devices, microwave circuit synthesis, microwave transistor amplifiers, reflectometer modeling, and CAD programs for the design of MIC's. In 1974, he participated in the IEEE/USSR Popov Society Exchange Program and visited various Russian technical institutes. He is currently the Director of the Microwave and Signal Processing Devices Division, U.S. Army Electronics Technology and Devices Laboratory.

In 1972, Mr. Gelnovatch received the U.S. Army R & D Achievement Award for the Development of DEMON, an optimal seek computer program to synthesize TEM circuits. He is a member of IEEE/MTT ADCOM and an Associate Editor of the Microwave Journal.