THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC.

# 1968 G-MTT INTERNATIONAL MICROWAVE SYMPOSIUM

## DIGEST AND TECHNICAL PROGRAM

MAY 20, 21, 22, 1968

HOWARD JOHNSON'S
NEW CENTER MOTOR LODGE

DETROIT, MICHIGAN

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Cover photos: Downtown Detroit seen across the international boundary from Windsor, Ontario, Canada. In the foreground is the Detroit River, one of the world's busiest waterways.

TECHNICAL PROGRAM

HOWARD JOHNSON'S NEW CENTER MOTOR LODGE

DETROIT, MICHIGAN

INTRODUCTORY SESSION: 0845-0900, Monday, May 20

Welcoming Remarks

J. E. Rowe, Co-Chairman, Steering Committee, 1968 G-MTT International Microwave Symposium

R. E. Henning, Chairman, G-MTT Administrative Committee

SESSION 1: 0900-1150, Monday, May 20

MICROWAVE NETWORKS

Chairman: R. J. Wenzel
Bendix Research Laboratories
Southfield, Michigan

SESSION 2: 1400-1710, Monday, May 20

SOLID-STATE MICROWAVE POWER GENERATION

Chairman: B. C. DeLoach, Jr.
Bell Telephone Laboratories
Murray Hill, New Jersey

Evening Sessions 2000-2200, Monday, May 20

PARALLEL SESSIONS

1. COMPUTER-AIDED DESIGN OF MICROWAVE NETWORKS
New Center Ballroom

ORGANIZER; W. J. Getsinger
Lincoln Laboratory
Massachusetts Institute of Technology

A panel of guest speakers will discuss the various philosophies employed in computer-aided design of microwave networks and will give examples of their present work. They will also discuss their future activities in this area. Following the presentation, an open discussion with questions and comments invited from the audience will take place. Brief summaries (5 minute limit) of new results or viewpoints by interested persons may also be presented. Persons with such contributions are asked to contact the session organizer in advance, if possible.

Guest Speakers and Panel:

M. O'Hagen, Texas Instruments
L. Young, Stanford Research Institute
H. Stinehelfer, Microwave Associates
R. Anderson, Hewlett-Packard Co.

2. SOLID-STATE CONTROL DEVICES
New Center Boulevard Rooms

ORGANIZER: D. K. Adams
Stanford Research Institute

Brief presentations will be given by a panel of guest speakers on high and low power microwave control devices using ferrite and semiconductor diode techniques. Fundamental limitations, performance, and cost will be compared for phase shifters, switches, circulators, duplexers and limiters. Following the presentations an open discussion will take place with questions and comments invited from the audience. Capsule summaries (5 minute limit) of new results or viewpoints not presented by the panel may also be given. Persons with such contributions are asked to contact the session organizer in advance, if possible.

Guest Speakers and Panel:

E. Stern, Lincoln Lab, MIT
N. J. Brown, Microwave Associates
R. U. Garver, Harry Diamond Labs
S. P. Clark, Hughes Aircraft Co.
J. E. Pippin, Scientific-Atlanta
M. D. Sohigian, Hewlett Packard Associates
R. G. Forrest, Microwave Associates

SESSION 3: 0900-1220, Tuesday, May 21

MICROWAVE INTEGRATED CIRCUITS

Chairman: F. A. Brand
USAECOM, Fort Monmouth, New Jersey

SESSION 5: 0840-1150, Wednesday, May 22

## FERRITE COMPONENTS

Chairman: J. E. Pippin
Scientific Atlanta
Atlanta, Georgia

SESSION 6: 1330-1630, Wednesday, May 22

## MICROWAVE ACOUSTICS AND MILLIMETER- AND OPTICAL-WAVE COMPONENTS

Chairman: L. Young
Stanford Research Institute
Menlo Park, California