

# The 1978 International Microwave Symposium

WILLEM STEENAART, SENIOR MEMBER, IEEE, AND ROY VANKOUGHNETT, MEMBER, IEEE

THE 1978 MTT International Microwave Symposium was organized by the Ottawa chapter of MTT with very significant assistance of members of the Montreal chapter. It was held at the Chateau Laurier Hotel, Ottawa, Canada, the first venture outside the United States of America.

The theme, *Microwaves Today and Tomorrow*, appeared as an appropriate choice, and so well matched to MTT's activities that we were surprised not to have seen it used before. As it becomes progressively more difficult to find unused themes we recommend this one for general adoption.

The Symposium attendance was 650 with 300 more signed up for the exhibits only. Approximate registration figures for the concurrent Symposia were: IMPI 275; CPEM 200; and for the IMPI-MTT Symposium on Electromagnetic Fields in Biological Systems: 165. All in all a large number of attendees, from many countries, came together for this wide choice of technical program material.

Our banquet attendance was 260, a number that was expertly handled by the Chateau's dining room staff. Our banquet speaker, Dr. George Sinclair, of Sinclair Radio Laboratories and of the University of Toronto gave a presentation on, "Is the Engineer Losing Contact with the Real World?" While we thank Dr. Sinclair for his excellent and stimulating talk, we hope to be speaking for all banquet attendees in saying that he started us to think more deeply about this problem.

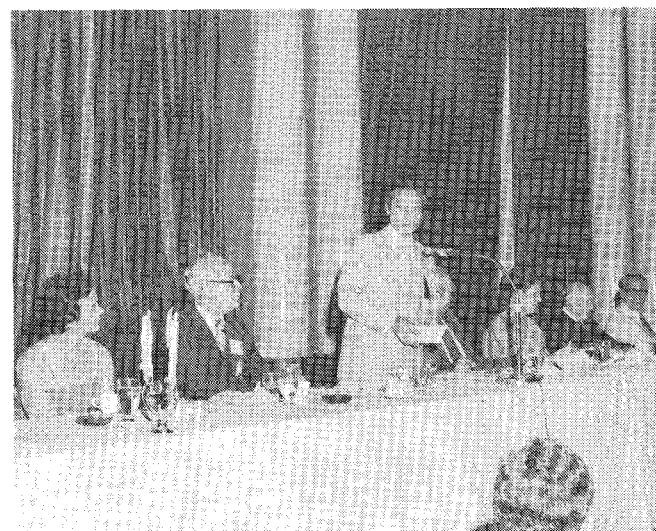
The exhibition, again managed by Howard Ellowitz, of the *Microwave Journal*, proved to be an unqualified success. Indeed we thank Howard, who, with his increasing demands for exhibit space, helped to steer us towards the Chateau Laurier Hotel. The attendance of wives, husbands, and children at the social events was large, also due to the social program functions shared by all four conferences. Ottawa and the surrounding countryside were enjoyed by all.

The registration proceeded smoothly, even with the added money changing task, due to the excellent services of Mrs. Marg Coll and her staff.

Overall, we found the Chateau Laurier a really excellent location for a Symposium of this size, and the added attraction of the concurrent Symposia contributed also much to the success of the Microwave Symposium.



Banquet address by George Sinclair.



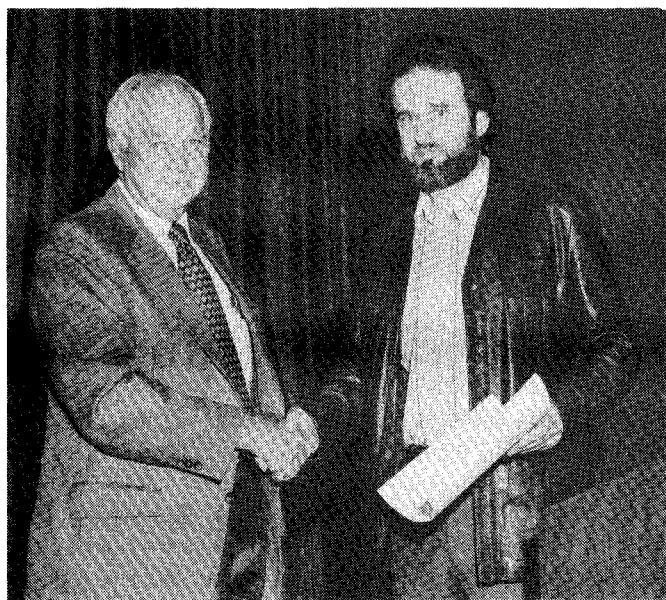
Head Table (left to right): Mrs. VanKoughnett, George Sinclair, Roy VanKoughnett, Ivan Getting, Mrs. Sinclair, Ernst Weber, Willem Steenaart.

## TECHNICAL SESSIONS

The technical program, planned and organized by the Technical Program Committee of 59 members from the United States, Canada, England, and Japan, fitted precisely in the format of four parallel sessions. There were



President and Past-President MTT-S, Hal Sobol and Larry Whicker.



IEEE President Ivan Getting presenting the Fellow Award to John Bandler.



Hal Sobol presenting the Microwave Career Award to Ernst Weber.

23 sessions and three panel sessions, where a total of 160 papers were presented. This required one evening time slot to present two of the panel sessions.

A total of 220 papers were submitted for consideration, which required a great deal of hard work on the part of the Program Committee Members, culminating in the February 20 meeting where the program took its final shape. The selection was based on anonymous papers, but admittedly from a few papers the authors' names are impossible to remove entirely.

An outline of the technical program follows.

Tuesday, June 27

*Session A1:* Microwave *Quo Vadis*  
*Chairman:* H. Sobol  
*Organizer:* L. Young

*Session B1:* Fin-line and Millimeter-Wave Components  
*Chairman and Organizer:* M. Caulton  
*Panel Session:* Stabilization of Fundamental-Frequency Microwave Oscillators for Radio-Relay Systems  
*Organizer and Moderator:* F. Ivanek  
*Session D1:* Filters and Passive Components  
*Chairman:* J. D. Rhodes  
*Organizer:* R. Levy  
*Session A2:* Digital Microwave Systems  
*Chairman:* G. Chao  
*Organizer:* P. T. Greiling  
*Session B2:* Computer-Aided Design  
*Chairman and Organizer:* J. W. Bandler  
*Session D2:* Fiber and Integrated Optics  
*Chairman:* G. L. Yip  
*Organizer:* D. B. Anderson  
*Panel Session:* Applications of Millimeter-Wave and Optical/IR Technologies  
*Organizer:* P. J. Meier  
*Moderator:* L. Young  
*Panel Session:* Applications of High-Speed Integrated Circuits to Microwave Systems  
*Chairman and Organizer:* P. T. Greiling

Wednesday, June 28

*Session A3:* Microwave GaAs FET's  
*Chairman:* F. Hasagawa  
*Organizer:* L. J. Eastman  
*Session B3:* Special Session on Millimeter-Wave Developments in Japan  
*Chairman and Organizer:* T. Makimoto

- Session C3:* Automated Network Analyzer Techniques  
*Chairman:* S. F. Adam  
*Organizer:* E. L. Komarek
- Session D3:* Microwave Field Theory  
*Chairman and Organizer:* P. Silvester
- Session A4:* Filters and Multiplexers  
*Chairmen:* C. Kudsia, R. Levy  
*Organizer:* R. Levy
- Session B4:* Microwave Systems  
*Chairmen:* R. B. Hicks, H. Ogura  
*Organizers:* J. Horton, K. Iizuka
- Session C4:* Microwave Measurements  
*Chairman and Organizer:* E. L. Komarek
- Session D4:* MIC Amplifiers and Oscillators  
*Chairman and Organizer:* R. H. Knerr

Thursday, June 29

- Session A5:* MIC Components  
*Chairman:* R. Douville  
*Organizer:* R. Knerr
- Session B5:* Microwave Network Theory  
*Chairman:* A. Oliner  
*Organizer:* P. Silvester
- Session C5:* Microwave High Power  
*Chairman:* H. Goldie  
*Organizer:* K. Tomiyasu
- Session D5:* Microwave Solid-State Devices  
*Chairman:* G. Haddad  
*Organizer:* L. F. Eastman
- Session A6:* Low Noise Techniques  
*Chairman:* S. Okwit  
*Organizer:* H. Okean
- Session B6:* Microwave Transmission Lines  
*Chairman:* T. Itoh  
*Organizer:* P. Silvester
- Session C6:* Submillimeter-Waves  
*Chairman and Organizer:* K. J. Button
- Session D6:* Microwave Acoustics  
*Chairman:* R. Mariani  
*Organizer:* C. S. Hartmann

#### WORKSHOPS

In addition to the technical program, four well-attended workshops were held on Monday, June 26th, and on Friday, June 30th, with an average attendance of 70.

#### DIGEST

The 489 page *Symposium Digest* edited by Jim Wong with the help of Jacques Legendre, both of the National Research Council, turned out very well. It can be ordered by the IEEE Catalogue Number 78CH1355-7 MTT, Library of Congress Card Number 66-9399.



Steering Committee

*Standing (left to right):* W. Threinen, R. Douville, A. Winter, R. W. Breithaupt, W. K. McRitchie, G. Painchaud.

*Sitting (left to right):* J. Y. Wong, L. Kubina, A. L. VanKoughnett, W. Steenaart, W. Hoefer.

#### ACKNOWLEDGEMENT

The Symposium's success has been due to the joint efforts of many people, who freely gave of their time and effort. The members of the Steering and Technical Program Committees are singled out especially, many thanks for their excellent contributions.

#### 1978 MTT SYMPOSIUM STEERING COMMITTEE

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*Sitting (left to right):* Clinton Hartman, Reinhard Knerr, Leo Young, Harry Goldie.

*Social Program:*

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M. Cuhaci, Communications Research Centre  
S. Kubina, Concordia University

*Publicity:*

R. Douville, Communications Research Centre

*Program Booklet:*

J. Y. Wong, National Research Council

*Digest:*

J. P. Legendre, National Research Council

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D. B. Anderson

A. L. Armstrong

J. W. Bandler

R. W. Beatty

P. Benedek

B. Berson

H. C. Bowers

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M. Caulton

G. Chao

P. J. B. Clarricoats

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