

**1996 IEEE MTT-S
INTERNATIONAL MICROWAVE
SYMPOSIUM DIGEST**

*Technical Program Contents
Thursday June 20th*



1996 Microwave Symposium

Technical Program Schedule

Session TH1A

Low Noise Devices and Circuits

8:00 am–9:50 am **Room 135** **Thursday, June 20, 1996**

Chair: M.S. Gupta, Hughes Aircraft, Co-chair: M. Pospieszalski, NRAO

TH1A-1	Highly Integrated Three-Dimensional MMIC Single-Chip Receiver and Transmitter	1209
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8:20 am	S. Chaki, T. Takagi, Y. Tsukahara, H. Matsubayashi, N. Andoh, Y. Sasaki and M. Otsubo	
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Session TH1B

Quasi-Optical Modulators and Oscillators

8:00 am–9:50 am **Room 132** **Thursday, June 20, 1996**

Chair: L. Dunleavy, University of South Florida, Co-chair: Z. Popovic, University of Colorado

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TH1B-6	Axially Symmetric Fabry-Perot Power Combiner with Active Devices Mounted on Both the Mirrors	1259
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TH1B-7	An Extended Resonance Spatial Power Combining Oscillator	1263
9:20 am	M. Rahman, T. Ivanov and A. Mortazawi	

Session TH1C
(Joint MTT-ARFTG)
Mario A. Maury, Jr. Memorial

Room 133

Thursday, June 20, 1996

Chair: S.F. Adam, Adam Microwave Consulting, Inc.

TH1C-1 8:00 am	Remembrance of Mario A. Maury, Jr. S. Adam	*
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TH1C-7 9:30 am	An Application of Membrane Probes for On-Wafer Testing of Unmatched High Power MMICS D. Tonks, W. Vaillancourt, K. Smith and E. Strid	1289

Session TH1D
High Speed Lightwave Communications Systems

Room 134

Thursday, June 20, 1996

Chair: N.R. Dietrich, AT&T Bell Laboratories, Co-chair: R.H. Knerr, AT&T Bell Laboratories

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TH1D-2 8:30 am	(Invited) Undersea Lightwave Transmission Technology and Techniques C.R. Davidson	1299
TH1D-3 9:10 am	(Invited) Lightwave Applications in Military—Present and Future B. Hendrickson	*

*Manuscript not available at time of publication

Session TH1E

Linear Device Modeling

8:00 am–9:50 am

Room 130

Thursday, June 20, 1996

Chair: J. Laskar, Georgia Inst. of Technology, Co-chair: S. Pritchett, Texas Instruments

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Session TH2A

Progress in High Speed Digital Applications

10:20 am–12:10 pm

Room 135

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Chair: C.T.M. Chang, Texas Instruments

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Session TH2B

Nonlinear Modeling and Analysis

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	K. Lu, P.M. McIntosh, C.M. Snowden and R.D. Pollard		
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	M. Celuch-Marcysiak and W.K. Gwarek		
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	A. Leke and J.S. Kenney		

Session TH2C

Scattering Parameter and Dielectric Measurements

10:20 am–12:10 pm

Room 133

Thursday, June 20, 1996

Chair: R.B. Marks, NIST

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Session TH2D

Microwave Photonic Devices

10:20 am–12:10 pm **Room 134** **Thursday, June 20, 1996**

Chair: C. Gee, Ortel Corp., Co-chair: D. Jaeger, Gerhard Mercator University, Duisburg

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Session TH2E

CAD Techniques Using Field Theory

10:20 am–12:10 pm **Room 130** **Thursday, June 20, 1996**

Chair: M. Mongiardo, University of Perugia, Co-chair: A.K. Sharma, TRW

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Session TH3A

Superconductor Microwave Technology

1:40 pm–3:30 pm **Room 135** **Thursday, June 20, 1996**

Chair: G.C. Liang, Conductus, Inc., Co-chair: A. Fathy, David Sarnoff Research Center

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	M. Nisenoff	
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Session TH3B

Sources

1:40 pm–3:30 pm **Room 132** **Thursday, June 20, 1996**

Chair: M. Odyniec, Hewlett-Packard, Co-chair: A.P.S. Khanna, Hewlett-Packard

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*Manuscript not available at time of publication

Session TH3C

Mapping of Fields and Waves in Integrated Circuit Structures

1:40 pm–3:30 pm

Room 133

Thursday, June 20, 1996

Chair: Z. Skvor, Czech Technical University, Co-chair: R. Ham, Consultant

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Session TH3D

Microwave Photonic Systems

1:40 pm–3:30 pm

Room 134

Thursday, June 20, 1996

Chair: A. Paolella, US Army LECOM-ROEC, Co-chair: H. Ogawa, NTT Wireless Systems Labs

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Session TH3E

Phased-Arrays

1:40 pm–3:30 pm

Room 130

Thursday, June 20, 1996

Chair: G.D. Hopkins, Georgia Institute of Technology, Co-chair: A. Truitt, Texas Instruments

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Session TH3F

Open Forum 2

2:30 pm–5:00 pm

Rooms 102/103

Thursday, June 20, 1996

Chair: Alfred Riddle, Macallan Consulting, Co-chair: Cindy Yuen, Space Systems/Loral

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Session TH4B

Chaos in Microwave Systems

4:00 pm–5:50 pm

Room 132

Thursday, June 20, 1996

Chair: R. Kaul, Army Research Lab.

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