

MESSAGE FROM THE 1996 μ APS CHAIRMAN

On behalf of the Industry Participation Committee, welcome to the 1996 IMS in San Francisco and to the first Microwave Application & Product Seminars (μ APS) presented by the Symposium Exhibitors. The purpose of the new Microwave Application & Product Seminars is to provide a forum for topical presentations on microwave products, applications, services and markets at the level of the microwave practitioner, including design and manufacturing engineers and marketing and management professionals.

The sessions will be located on the exhibition floor. All registrants of either the exhibition or the traditional technical sessions are welcome to attend. Two parallel sessions will be held on Tuesday, Wednesday and Thursday. Individual presentations will be 20 or 45 minutes. These presentations have the option of including sales material and handouts.

These new seminars bring a new dimension to participants' ability to learn about new products and techniques required for the continuing growth of the microwave industry. We are looking forward to seeing you in San Francisco.

Martin I. Grace, μ APS Technical Chairman

Barry D. Bakner & Gary L. Koker,
Industry Participation Committee Co-Chairmen

1996 μ APS SCHEDULE

The 1996 Microwave Application & Product Seminar will be held on Tuesday, Wednesday and Thursday, June 18-20, 1996 in conjunction with the 1996 International Microwave Symposium (IMS), at the Moscone Center, San Francisco. Sessions are open to all exhibition attendees. The papers will be presented in two parallel sessions in the exhibition area.

Tuesday, June 18, 1996

1:00 PM-5:00 PM	Session A	Microwave and RF Devices
1:00 PM-4:30 PM	Session B	Test and Measurements Techniques

Wednesday, June 19, 1996

9:30 AM-4:30 PM	Session A	Microwave and RF Devices
9:30 AM-4:30 PM	Session B	Microwave and RF Components

Thursday, June 20, 1996

9:30 AM-2:00 PM	Session A	Computer Aided Design
9:30 AM-2:30 PM	Session B	Topics of Special Interest to Microwave & RF Engineers

μ APS-MICROWAVE APPLICATION & PRODUCT SEMINARS-TECHNICAL PROGRAM

TUESDAY, JUNE 18, 1996 EXHIBITION FLOOR, MOSCONE CONVENTION CENTER

MICROWAVE & RF DEVICES SESSION

GaAs MMICs for High Volume Consumer Electronics Applications J. Patel, Anadigics, Warren, NJ	1:00 PM
3 Volt, 2.4 GHz ISM Band Chip Set R. Ruebusch, Celeritek, Santa Clara, CA	2:00 PM
A Subminiature Push-on Connector for High Density Packaging M. Peeran, Connecting Devices Inc., Long Beach, CA	2:30 PM
HFET, PHEMT and GaAs MMICs and Foundry Services for the Communications Industry M. Tessaro, Texas Instruments, Dallas, TX	3:00 PM
	3:30 PM
MMIC Power Amplifiers for Digital Cellular and PCS Applications R. Ruebusch, Celeritek, Santa Clara, CA	4:00 PM
Passive Temperature Compensation for RF Amplifier Gain J. Mazzochette, EMC Technology Inc., Cherry Hill, NJ	4:30 PM

TEST & MEASUREMENT TECHNIQUES SESSION

Matching Networks, Package Emulation, 65 RF Lines and Other Pyramid Probe Examples K. Smith, Cascade Microtech
A Harmonic Load Pull System for Power Amplifier Design M. Fennelly, ATN Microwave Inc., Billerica, MA
ALPS - Active Load Pull System for R&D and Production Testing C. Tsironis, Focus Microwaves Inc., Point-Claire, Quebec, Canada
Automated Device Characterization System J. Adamson, Maury Microwave Corp., Ontario, CA
RI 7100A Microwave ATE System Roos Instruments, Santa Clara, CA
Multi-port Measurement Solutions T. Kilbourne, Wiltron Co., Morgan Hill, CA

WEDNESDAY, JUNE 19, 1996 EXHIBITION FLOOR, MOSCONE CONVENTION CENTER

MICROWAVE & RF DEVICES SESSION

Advance III V Semiconductor Wafer Products from TLC T. Childs, TLC Precision Wafer Technology, Minneapolis, MN	9:30 AM
Silicon Power Transistors for Handheld Wireless Communications D. Moy, Hewlett-Packard, Newark, CA	10:30 AM
The HP Components Solutions for Low Noise Block Downconverters S. Yajima, Hewlett-Packard, Newark, CA	11:00 AM
Low Cost, High Performance GaAs MMICs for Commercial Markets in Millimeter-wave and Wireless Communications R. Pinato, TRW, Redondo Beach, CA and J. Neal, RFMD, Greensboro, NC	11:30 AM

MICROWAVE & RF COMPONENTS SESSION

High Performance RF Products in Wireless Applications D. Johnson and R. Buswell, Watkins-Johnson Company, Palo Alto, CA
GPS Preamplifiers, Filters, Limiters and Antennas J. Frost, Daden-Anthony Associates, San Clemente, CA
Radar Sensors for Industrial and Vehicular Applications R. Knox, Epsilon Lambda Electronics, Geneva, IL
IQ Vector Modulator - The Ideal Control Component M. Tuckman, General Microwave Corp., Amityville, NY

μAPS-MICROWAVE APPLICATION & PRODUCT SEMINARS-TECHNICAL PROGRAM

WEDNESDAY, JUNE 19, 1996 EXHIBITION FLOOR, MOSCONE CONVENTION CENTER

MICROWAVE & RF DEVICES SESSION

MICROWAVE & RF COMPONENTS SESSION

	12:00 PM	Application Specific RF Components for High Volume Markets R. Setty, Mini-Circuits, Brooklyn, NY
Advanced MMIC Control & Converter Products for Personal/Infrastructure Communications Circuits N. Hildreth, Hittite Microwave Corp., Woburn, MA	12:30 PM	1/2 Watt "Power Mixers" Extend the Dynamic Range of Front-Ends with LNAs D. Neuf, Miteq Inc., Hauppauge, NY
Replicating a Family of Si MMIC Darlington Amplifiers J. Moniz, M/A-COM, Lowell, MA	1:00 PM	Surface Mount Coaxial Connector "SMCC" B. Rosenberger, Rosenberger Hochfrequenztechnik, Tittmoning, Germany
VLNAs for DCS/PCS Applications M. Eron, M/A-COM, Lowell, MA	1:30 PM	Trimmer Capacitors, The Other Trimmers S. Orman, Sprague-Goodman Electronics, Westbury, NY
Ultralinear Amplification for Wireless Communications MicroWave Technology Inc., Fremont, CA	2:00 PM	VCOs for Wireless Applications U. Rohde and S. Joshi, Synergy Microwave Corporation, Paterson, NJ
Low Cost Monolithic Microwave Amplifiers R. Setty, Mini-Circuits, Brooklyn, NY	2:30 PM	Low Profile RF Components for WLAN and PCS M. McWhorter, TRAK Microwave Corp., Tampa, FL
Recent Advances in Silicon RF Power MOSFETs J. Walker, Semelab PLC, Lutterworth, UK	3:00 PM	Phased-Array Circulators S. Cheng, TRAK Microwave Corp., Tampa, FL
High Linearity Power Amplifiers for Space and Digital Phone Applications J. Griffiths, Raytheon Microelectronics, Andover, MA	3:30 PM	Wideband, Low Noise Commercial Frequency Synthesizers for SATCOM and Microwave Point-to-Point Applications M. Simpson and R. Patson, Verti-Com Inc., Santa Rosa, CA
	4:00 PM	Selecting and Specifying Trimmer Capacitors B. Kapner and D. Ditlya, Voltronics Corp., Danville, NJ

THURSDAY, JUNE 20, 1996 EXHIBITION FLOOR, MOSCONE CONVENTION CENTER

COMPUTER-AIDED DESIGN SESSION

SPECIAL INTEREST TOPICS SESSION

Technology Breakthroughs for Fast CAE Solutions to RF IC Design Problems L. Williams, Ansoft Corp., Pittsburgh, PA	9:30 AM	Understanding the Power Handling Capability of High-Temperature Superconducting Microwave Circuits C. Wilker, DuPont Superconductivity, Wilmington, DE
Windows Based, Low Cost Three-dimensional Electromagnetic Software J. Zheng and J. Roth, Bay Technology, Aptos, CA	10:00 AM	
Microwave Harmonica 7.0 Brings Wireless Circuit Simulation Capability to the PC J. Gerber, Compact Software, Paterson, NJ	10:30 AM	Subsystem to Enhance Base Station Sensitivity and Selectivity S. Garrison, D. MacMillan and G. Liang, Conductus Inc., Sunnyvale, CA
SPICE Modeling of a Silicon Bipolar Junction Transistors T. Boles, M/A-COM, Lowell, MA	11:00 AM	New Copper-clad Laminate Materials for Wireless Applications C. Zimmerman and C. Ludwig, Glasteel Industrial Laminates (GIL), Collierville, TN
The Benefits of using MSC's Predictive Engineering Software, μWave Lab J. DeFord, MacNeal Schwendler Corp., Milwaukee, WI	11:30 AM	Commercialization of High Temperature Superconductors J. Simmons, Superconductor Technologies, Santa Barbara, CA
Microwave CAD, including EM Optimization and Modeling of Arbitrary Geometries J. Bandler, Optimization Systems Associates, Ontario, Canada	12:00 PM	
Microstripes - A New Volume Meshing Simulator Based on The TLM Method D. Johns, Sonnet Software Inc., Liverpool, NY	12:30 PM	Progress in Ceramic Microwave Dielectric Materials R. Brown, Morgan-Matroc Unilator Division, Wrexham, UK
Precise Quantative Evaluation of Electromagnetic Analysis Error J. Rautio, Sonnet Software Inc., Liverpool, NY	1:00 PM	Low Noise Amplifiers J. Siddiqui, Miteq Inc., Hauppauge, NY
Ceramic Products in Microwave Applications H. Masuda, SMI Ceramics America, Santa Clara, CA	1:30 PM	Lateral Diffused MOS RF Transistors S. Leong, Polyfet RF Devices, Camarillo, CA