

50th ARFTG Conference: Technical Agenda

Portland, Oregon, December 4-5, 1997

Measurement Techniques for Digital Wireless Applications

	Session A: Intermodulation Distortion Measurements	Authors
A-1	Nonlinear Characterization by Harmonic Generation: An Alternative Technique for Measuring Intermodulation Distortions	Charles Wilker & Charles F. Carter III (<i>DuPont Superconductivity, Wilmington, DE</i>)
A-2	The Measurement of Intermodulation Products on Passive Components and Transmission Lines	Bernhard Rosenberger (<i>Rosenberger Hochfrequenztechnik GmbH & Co., Tittmoning, Germany</i>)
A-3	Power Amplifier Intermodulation Distortion Measurements	Tom Ruttan (<i>Maxtek Components Corp., Beaverton, OR</i>)

	Session B: Historical Session	Authors
B-1	A History of Microwave Wafer Probing	Eric Strid (<i>Cascade Microtech, Inc., Beaverton, OR</i>)
B-2	History of Microwave Metrology at NIST	Gerome R. Reeve (<i>NIST, Boulder, CO</i>)
B-3	A Brief Look Back at Microwave Noise Generator Calibration	Bill Pastori (<i>Maury Microwave, Ontario, CA (retired)</i>)
B-4	Vector Network Analysis and ARFTG: A Historical Perspective	Gary Simpson (<i>Maury Microwave, Ontario, CA</i>)

	Session C: Design and Testing of Wireless Components and Systems	Authors
C-1	Characterization and Simulation of a 915 MHz Wireless Receiver [presentation available]	Lawrence P. Dunleavy, Paul G. Flikkema, & Anbuselvan Kuppusamy (<i>University of South Florida, Tampa, FL</i>)
C-2	Designing a C-Band Downconverter for High Testability	Edward Grimes, Thomas Weller, Lawrence P. Dunleavy (<i>University of South Florida, Tampa, FL</i>), James Culver (<i>Raytheon E-Systems, St. Petersburg, FL</i>)
C-3	The Effects of Line Width and Slot Etching on Silicon-Based CPW at MM-Wave Frequencies	Thomas Weller, Michael Imparato, Lawrence P. Dunleavy (<i>University of South Florida, Tampa, FL</i>), Rashaunda Henderson, Steven Robertson, Linda Katehi (<i>University of Michigan, Ann Arbor, MI</i>)

	Session D: Power Sensors	Authors
D-1	High Speed Power Measurements for Digital Wireless Applications	Ken Harvey (<i>Anritsu</i>)
D-2	Vector Corrections for an Automated Power Sensor Calibration System	John Gregory Burns (<i>Northrup Grumman Corp., Baltimore, MD</i>)

Session E: CDMA Measurements and Relevant Load Pull Techniques		Authors
E-1	ACPR, IM3 and their Correlation for a PCS CDMA Power Amplifier	Wang Xinwei, Hiroshi Nakamura (<i>OKI Techno Center, Singapore</i>) and Rajinder Singh (<i>Institute of Microelectronics, Singapore</i>)
E-2	CDMA Load Pull Measurements with Harmonic Tuning and Harmonic Behavioral Modeling	Michael Fennelly, David Kinzel (<i>ATN Microwave, Inc., N. Billerica, MA</i>)
E-3	Measurement of Large Signal Device Input Impedance During Load Pull	Gary Simpson, Mike Majerus (<i>Maury Microwave, Ontario, CA</i>)

Session F: Vector Network Analyzer Characterization		Authors
F-1	A Method for Comparing Vector Network Analyzers	Donald C. DeGroot, Roger B. Marks, Jeffrey A. Jargon (<i>NIST, Boulder, CO</i>)
F-2	Formulations of the Basic Vector Network Analyzer Error Model Including Switch Terms	Roger B. Marks (<i>NIST, Boulder, CO</i>)
F-3	Characteristics and Accuracy of a Fully Corrected Four-Port Vector Network Analyzer	Manfred Schindler, Peter Phillips, Michael Fennelly, Vahé Adamian, P. Enquist (<i>ATN Microwave, Inc., N. Billerica, MA</i>)

Session G: Calibration, Measurements and Testing		Authors
G-1	Series-Resistor Calibration	Dylan F. Williams, David K. Walker (<i>NIST, Boulder, CO</i>)
G-2	Data Assessment of the ARFTG Microwave Vector Network Analyzer Measurement Comparison Program	Ken Wong (<i>Hewlett-Packard Co., Santa Rosa, CA</i>)
G-3	A High Throughput On-Wafer RFIC Tester	K. J. Kerwin, F.L. Bugely, R. Chavez, J. Marroquin, R. Laurell, D. Veteran, D. Olney, D. McGinty, G. L. Madonna (<i>Hewlett-Packard Co., Santa Rosa, CA</i>)

Session H: Panel Session	Speakers
Digital Wireless Communication Systems Measurement	Michael Fennelly (<i>ATN Microwave, Inc., N. Billerica, MA</i>) Edward M. Godshalk (<i>Maxim Integrated Products, Beaverton, OR</i>) Leonard A. Hayden (<i>Cascade Microtech, Inc., Beaverton, OR</i>) Roger B. Marks (<i>NIST, Boulder, CO</i>) John F. Sevic (<i>Spectrian Corp., Sunnyvale, CA</i>) Gary Simpson (<i>Maury Microwave, Ontario, CA</i>)