

# 1986 MTT Symposium Best Presented Paper Awards

THE "Best Presented Paper" Awards were established by the Technical Program Committee to encourage better presentation of papers, both Regular Session and Open Forum. The need for improved presentation quality has been present for some time, but became more apparent with the introduction of the Open Forum, which called for attention to details of visual communication far removed from technical content. Papers in Regular Sessions have also often suffered from poor quality presentation material and poor delivery. Instructions on the technique of making a good technical presentation have been traditionally included in the Author's Kit, but have probably been read, much less adhered to, by only a small fraction of presenters. In short, then, the Committee decided to use a carrot in addition to the printed, and subtle, stick.

The format which was decided upon was a single award per Regular Session and three awards per Open Forum

Session in order to approximate the same chance of winning in each. An Award Certificate was to be given to each winning paper. Judging teams made up of members of the MTT Technical Committees were assigned to each Session. The decision of each team was transmitted, at the end of each Session, to the Symposium Office. In a few cases, a decision was made to make dual awards in a single Regular Session.

A complete list of winners is given below, along with Session and Paper Titles. Each winner should be justifiably proud of this distinction and of the example he or she has set for presentations at future Symposia.

B. D. GELLER  
Vice-Chairman  
1986 Technical Program  
Committee

<i>Session</i>	<i>Paper Title</i>	<i>Author(s)</i>
Guided-Wave Structures I	Slow-Wave Characteristics of Ferromagnetic Semiconductor Microstrip Line	H. Ogawa, T. Itoh
Low-Noise Techniques	Dielectric Resonator Oscillators at 4, 6, and 11 GHz	K. R. Varian
IMPATT's	Indirect Sub-Harmonic Optical Injection Locking of a Millimeter-Wave IMPATT Oscillator	A. Daryoush, P. Herczfeld, A. Rosen, A. Sharma, V. Contario
Guided-Wave Structures II	Analysis and Measurements of Nonradiative Dielectric Waveguide Bends	T. Yoneyama, H. Tamaki, S. Nishida
Passive Components	Broad-Band Dielectric Waveguide 3-dB Couplers Using Asymmetrical Coupled Lines	P. K. Ikäläinen, G. L. Matthaei, M. M. Monte
Oscillator Topics	Inter-Injection-Locked Oscillators with Applications To Spatial Power Combining and Phased Arrays	K. D. Stephan, J. Hubert
Millimeter-Wave Oscillators	A mm-Wave Microslab™ Oscillator	H. B. Sequeira, J. A. McClintock
	Barium Ferrite-Indium Phosphide mm-Wave Oscillators	Y. S. Lau, D. Nicholson

Open Forum I	Millimeter-Wave QPSK Modulator in Finline	G. B. Gajda, C. J. Verver
	Accurate Characterisation and Modeling of Transmission Lines for GaAs MMICs	H. J. Finlay, J. A. Jenkins, I. G. Eddison
	A FET Amplifier in Finline Technique	J. L'Ecuyer, G. B. Gajda, W. J. R. Hoefer
Solid-State Topics	50-W/CW Diode Tuned UHF Filter	G. DiPiazza
Microwave Systems	Millimeter-Wave Imaging Sensor	W. J. Wilson, R. J. Howard, A. C. Ibbott, G. S. Parks, W. B. Ricketts
Distributed FET Amplifiers and Circuits	A Distributed 1-12 GHz Dual-Gate FET Mixer	T. S. Howard, A. M. Pavo
	Internal Microwave Propagation and Distortion Characteristics of Traveling-Wave Amplifiers Study by Direct Electrooptic Sampling	M. J. W. Rodwell, K. J. Weingarten, D. M. Bloom
Filters For Satellite Applications	Realization of an Exact 5-Pole Elliptic Function Filter Employing Dielectric Loaded Triple-Dual-Mode Cavity Structure	D. Siu
Microwave Systems II	Gigahertz Bandwidth Multibit Phase Sampling and Reconstruction of Microwave Signals	D. G. D. Clark, G. B. Wordsworth
FET Modeling	An Accurate FET Modeling from Measured S-Parameters	H. Kondoh
Dielectric Resonators and Filters	Varactor Tuned Bandpass Filters Using Microstrip-Line Ring Resonators	M. Makimoto, M. Sagawa
Focused Session—Manufacturing Methods	Low-Cost TO Packages For High-Speed/Microwave Applications	D. A. Larson, D. E. Heckaman, J. A. Frisco, D. A. Haskins
GaAs FET Amplifiers	A Low-Phase Noise MMIC/Hybrid 3.0-W Amplifier at X-Band	T. Dao, S. Huettner, A. Platzker
Open Forum II	30-Way Radial Power Combiner for Miniature GaAs FET Power Amplifiers	E. Belohoubek, R. Brown, H. Johnson, A. Fathy, D. Bechtle, D. Kalokitis, E. Mykietyn

Open Forum II	Thermal Characterization of Microwave Power FET's Using Nematic Liquid Crystals	M. M. Minot
	A Microwave-to-Optical Transducer	L. F. Jelsma
Microwave Acoustics and Magnetostatics	Microwave Acoustic Devices in Systems	B. R. McAvoy
GaAs FET Oscillators, Doublers, and Mixers	Design of a Novel FET Frequency Doubler Using a Harmonic Balance Algorithm	R. Gilmore
Focused Session—Micro-Aspects and Applications of GHz/GBIT Optical Transmission Systems I	Overview of the Applications of Microwave Techniques for Lightwave Systems	H. Sobol
Microwave Measurements I	An Automated Measurement Technique for Measuring Amplifier Load-Pull and Verifying Large-Signal Device Models	M. Pierpoint, R. D. Pollard, J. R. Richardson
MIC Subsystems	A Ka-Band Dual-Channel Tracking Receiver Converter	M. A. Smith, A. M. Pavio, B. Kim
Focused Session—Microwave Aspects and Applications of GHz/GBIT Optical Transmission Systems II	Linearity Characterization of Connectorized Laser Diodes Under Microwave Intensity Modulation by AM/AM and AM/PM Measurements	W. I. Way, A. Afrashteh
Microwave Measurement Techniques II	Microwave Resonator Circuit Model From Measured Data Fitting	W. P. Wheless, Jr., D. Kajfez
Passive Circuit Modeling	Coplanar Waveguide versus Microstrip for Millimeter-Wave Integrated Circuits	R. W. Jackson
Optical Devices for Microwave Applications	Self-Oscillating GaAs FET Demodulator and Down-Converter for Microwave Modulated Optical Signals	C. Rauscher, L. Goldberg, A. M. Yurek
Ferrites	Simultaneous Dual-Polarization Ferrite Phase Shifter	W. E. Hord, C. R. Boyd, Jr.
Biological Effects & Medical Applications	A Three-Band Microwave Radiometer System for Noninvasive Measurement of the Temperature at Various Depths	S. Mizushima, Y. Hamamura, T. Sugiura
Analytical and Numerical Methods	Proposal of Surface-Wave Planar Circuit: Formulation of its Planar Circuit Equations and its Practical Application	J. Hsu, T. Anada, F. Eriguchi
Joint with Monolithics Symposium—Microwave Amplifiers	A Stable 2-26.5-GHz Two-Stage Dual-Gate Distributed MMIC Amplifier	J. Orr