

WMN — 08:00-17:00 Monday (6/16/08)
Applications and Misapplications of Measurement
Uncertainty

Topics and Speakers:

- 1- A Review of Current Recommended Practices for Evaluating Uncertainty, Including Revisions of the ISO GUM, Nick Ridler, NPL
- 2- Use and Misuse of Uncertainties in Statistical Process Control, Ken Wong, Agilent Technologies
- 3- Common Mistakes and Pitfalls When Analyzing Microwave Measurement Uncertainties, Brian Lee, Anritsu.
- 4- Calibration Uncertainty Estimation for the S-parameter Measurements at the Wafer Level, Andrej Rumiantsev, SUSS MicroTec Test Systems GmbH.
- 5- The Importance of Measurement Verification for Accurate Uncertainty Analysis of Network Analyzer PCB TRL Calibration Standards, Heidi Barnes, Verigy.
- 6- Uncertainty for Digital Modulation Measurement, Brian Lee, Anritsu
- 7- Uncertainty and Modulated-signal Measurements, Kate Remley, National Institute of Standards and Technology (NIST), RF Field Group

Organizers: Nick. Ridler, National Physical Laboratory (NPL); Daniel Pasquet, ENSEA; Andrej Rumiantsev, SUSS MicroTec Test Systems GmbH.

Sponsors: MTT-11, ARFTG

Workshop Abstract: Following recent successful workshops during Microwave Week 2006 (titled, “Practical methods for determining the accuracy of measurements; a review of techniques both old and new”) and European Microwave Week 2007 (titled, “Determining accuracy of measurements at high frequencies – from error to uncertainty”), this workshop will build on this success by presenting more practical information on evaluating accuracy (and, more generally, uncertainty) of measurements made at RF and microwave frequencies. This workshop will review the current status of methods that are recommended for evaluating uncertainty and present an update on the latest developments in this field. Specific presentations will then identify areas where common mistakes can occur when applying uncertainty in different circumstances, i.e. Statistical Process Control (SPC) and the analysis of microwave measurement data. Finally, applications of uncertainty to particular measurement environments, i.e. planar circuit measurements and digital modulation measurement, will be presented.