

2009 CALL FOR PAPERS



SINGAPORE
POLYTECHNIC



I²MTC™ *International Instrumentation and Measurement Technology Conference*

Suntec Singapore International Convention & Exhibition Centre, Singapore, May 5-7, 2009

The Conference focuses on all aspects of instrumentation and measurement science and technology – research, development and applications. The list of program topics includes but is not limited to:

MEASUREMENT SCIENCE & EDUCATION

Theoretical foundations
Quantities, units & standards
Calibration & self-calibration
Measurement uncertainty
Methodology of teaching

MEASUREMENT SYSTEMS

Automated test & diagnostics systems
Fault-tolerant & resilient measurement systems
Integrated & visual measurement systems
Distributed measurement systems
Autonomous measurement systems
Non-invasive measurement systems
Virtual measurement systems
Measurement microsystems
Human-computer interface

MEASUREMENT-DATA ACQUISITION

Sensors & transducers
A/D and D/A converters
Analog & mixed signal processing
Measurement signal generation
Remote measurements & telemetry

MEASUREMENT-DATA PROCESSING

Mathematical modeling of signals and systems
Data preprocessing & postprocessing
Digital signal processing
Image processing & pattern recognition
Inverse problems & signal reconstruction
Signal detection & classification
Sensor array processing
Soft computing
Measurement-data management

MEASUREMENTS OF PHYSICAL QUANTITIES

Electrical & power measurements
Dielectric & magnetic measurements
Temperature, moisture & humidity measurements
Mechanical measurements & material analysis
Optical measurements
Chemical & biological measurements

MEASUREMENT APPLICATIONS

Robotics & industrial monitoring
Automotive & transportation
Avionics & aerospace
Ships and marine technology
Environmental monitoring
Medicine & scientific research
Security & biometrics
Telecommunications

Potential authors are invited to submit extended abstracts via the I²MTC website (<http://imtc.ieee-ims.org/>). Each extended abstract (3 or 4 pages in English) should report results of the original research of theoretical or applied nature. The extended abstract should, moreover, explain the significance of the contribution and contain a list of key references. It must be prepared according to the abstract preparation guidelines provided on the I²MTC website. A Student Paper Contest will be held for both graduate and undergraduate student papers, with cash awards for the best papers and travel subsidies ranging from USD 300 to USD 1000 depending on student location. Extended abstracts should be submitted by the students according to the rules posted on the website and should be identified as student papers. Check that website for detailed instructions, and follow the deadlines:

- **November 10, 2008** – HARD DEADLINE for the submission of extended abstracts
- **December 19, 2008** – for the notification of authors on the acceptance or rejection of extended abstracts
- **March 1, 2009** – for the submission of camera-ready full-text papers

The extended abstracts will be reviewed by the Technical Program Committee. The authors of accepted abstracts, who submit the full-text papers, will be obliged to guarantee that they register for the Conference, pay registration fees, attend the Conference, and present their papers. The authors of papers, presented during I²MTC 2009, will be allowed to submit updated and extended versions of those papers to the Special Issue of IEEE Transactions on Instrumentation & Measurement on I²MTC 2009 to be published in 2010.