

# 2009 CALL FOR PAPERS



SINGAPORE  
POLYTECHNIC



## **I<sup>2</sup>MTC**™ *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 I<sup>2</sup>MTC 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 I<sup>2</sup>MTC 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:

- **October 13, 2008** – 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 I<sup>2</sup>MTC 2009, will be allowed to submit updated and extended versions of those papers to the Special Issue of IEEE Transactions on Instrumentation & Measurement on I<sup>2</sup>MTC 2009 to be published in 2010.