



**IEEE Instrumentation and Measurement Technology Conference**  
***The 22nd Renewal***

Fairmont Chateau Laurier Hotel, Ottawa, Ontario, CANADA  
17-19 May 2005 (Tuesday -Thursday)

**Call for Papers**

The conference studies all aspects of instrumentation, measurement and control technologies - theory, research and development and applications. Program topics include but are not limited to:

**MEASUREMENT SCIENCE**

Metrology & standards  
Measurement principles education

**DATA ACQUISITION**

Sensors & transducers, smart sensors  
Calibration & self-calibration  
A/D, D/A & data acquisition  
Remote measurements & telemetry  
Waveform measurement, analysis & generation  
Sensitivity & noise

**INSTRUMENTATION TECHNOLOGIES**

Automated test & measurement systems  
Instrumentation & prototype development  
Frequency, microwave and laser I&M systems  
Integrated & visual measurement systems  
Human-computer interface  
Networked & distributed measurements  
Autonomous sensing & measurement systems  
Non-invasive instrumentation & measurement  
Measurement microsystems  
Testing & diagnosis of I&M systems  
Fault-tolerant & resilient I&M systems

**DATA PROCESSING TECHNOLOGIES**

Analog, digital & mixed-signal processing  
Image processing & imaging systems  
Identification, control & distributed monitoring  
System prediction & sensor fusion  
Soft computing for intelligent I&M systems

**PHYSICAL QUANTITIES MEASUREMENTS**

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

**MEASUREMENT APPLICATIONS**

Robotics, industrial automation & manufacturing  
Automotive & transportation  
Avionics & aerospace  
Environmental monitoring  
Medicine & science  
Security & biometrics  
Telecommunications  
Virtual environments

Authors will submit electronically 1 copy of an extended abstract (3 or 4 pages) *in English*, reflecting new or advanced study, theory or application and including the significance of the contribution, a list of references and figures or tables. Abstracts must be prepared according to the Abstract Preparation Guide and must be accompanied by an Abstract Submission Form. Both documents may be downloaded from the IMTC website – <http://www.ieee-imtc.org> Check the website for all instructions and details. Important dates:

- **4 October 2004** – Abstract submission deadline – submit to [lee.myers@ieee.org](mailto:lee.myers@ieee.org)
- **17 December 2004** – Author notification of acceptance or rejection
- **4 March 2005** – Deadline for receipt of final manuscript

Papers will be reviewed by the IMTC International Program Committee. Authors of accepted abstracts *must guarantee they will register at the conference, pay registration fees, attend and present their papers*. An accepted paper will be published in the proceedings only if the final manuscript is accompanied by registration form(s) and fee(s) for at least one of the authors (only *full member/non-member registration fees* will be allowed – *no exceptions!*) One author registration covers publication of up to 2 accepted papers; each additional paper under the same registration requiring a publication fee of US\$50. Authors of accepted and presented papers may submit extended manuscripts to the special issue of *IEEE Transactions on Instrumentation & Measurement* on IMTC/2005, to be published in 2006.

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