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2011 IEEE International Instrumentation and Measurement Technology Conference

Four Points by Sheraton Hangzhou, Binjiang Hangzhou, P. R. China May 10-12, 2011

Call for Papers

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

FUNDAMENTALS

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

SENSORS AND TRANSDUCERS

Smart sensors and sensor networks
Optical, chemical and biological sensors
Wireless sensors
Sensor arrays
Energy harvesting
Sensor standards
Sensor applications

MEASUREMENTS OF PHYSICAL QUANTITIES

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

MEASUREMENT-DATA & SIGNAL PROCESSING

A/D and D/A converters
Analog and mixed signal processing
Data preprocessing & postprocessing
Digital signal processing
Digital image processing
Pattern recognition
Inverse problems & signal reconstruction
Signal detection & classification
Sensor array processing
Data mining and fusion

MEASUREMENT 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
Automated test & diagnostics systems

MEASUREMENT APPLICATIONS

Health care Food safety and security Quality assurance and authentication Renewable energy systems Carbon capture and storage Plant optimization **Environmental monitoring** Intelligent buildings Multiphase flow measurement Soft sensing and soft computing Robotics and industrial monitoring Automotive & transportation Avionics and aerospace Ships and marine technology Medicine and scientific research Security and biometrics Telecommunications Remote sensing

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 deadlines:

• November 15, 2010 – Deadline for submission of extended abstracts.

• December 20, 2010 – Notification of authors of acceptance or rejection decisions.

• March 1, 2011 – Deadline for the submission of camera-ready full-text papers.

The extended abstracts will be reviewed by the Technical Program Committee. The authors of accepted papers must register for the Conference and attend to present their papers. The authors of papers, presented during I²MTC 2011, will be allowed to submit expanded and extended versions of their papers to the Special Issue of IEEE Transactions on Instrumentation & Measurement on I²MTC 2011 to be published in 2012.

