

Call for Papers



ICIEA 2006

THE 1ST IEEE CONFERENCE ON INDUSTRIAL ELECTRONICS AND APPLICATIONS

24 - 26 May 2006

Marina Mandarin Hotel, Singapore



The 1st IEEE Conference on Industrial Electronics and Applications (ICIEA 2006) will be held from 24th May to 26th May 2006, Singapore. The Conference is organized by IEEE Industrial Electronics (IE) Chapter and co-organized with IEEE Industry Applications/Power Electronics (IA/PEL) Chapter and IEEE Singapore Section.

The purpose of the conference is to create a forum for scientists, engineers and practitioners throughout the world to present the latest techniques in Industrial Electronics. Conference scope covers all practical aspects of the theory and methods of electronics, control, systems, instrumentation for industrial applications. In addition to the technical sessions, there will be plenary sessions.

The Proceedings of ICIEA will be included in the IEEE Xplore database and indexed by EI Compendex.

High quality papers containing original contributions within the following areas are solicited:

Control Theory and Application: Adaptive and intelligent control, Hybrid control, Digital control theory and development, Robust control, Nonlinear systems and control, Process control, System theory and applications, Cybernetics and new methodologies.

Computational Intelligence: Neural networks, fuzzy systems, genetic algorithm, industrial applications of evolutionary computing, industrial applications of intelligent systems,

Power Electronics: Power devices and components, Power quality control, FACTS, PFC, Harmonic analysis and compensations, energy systems, high frequency converters and SMPS, switching circuits and power (AC/AC, AC/DC, DC/AC and DC/DC) converters, motors and drives, high performance controls.

Mechatronics: Robotics, Sensors and sensor fusion, Industrial vision, Motion control, Micro electro-mechanical systems, Integrated design and systems.

Signal Processing: Signal, image and data processing, Modeling and simulation, Estimation and identification, Instrumentation and transportation electronics, Vision and multi-media.

Automation : Instrumentation systems , Flexible manufacturing systems, Process automation , Man-machine interactions, Computer integrated manufacturing, Factory modelling and simulation, Intelligent automation

Emerging Technologies: Modeling and simulations of biological systems, Biomedical instrumentation and application, Micro-electromechanical systems, Electric vehicles and intelligent transportation, Industrial applications of internet technologies, Industrial applications of multimedia, Portable electronics, Integrated systems and processes

Invited Sessions: The Technical Programme Committee is soliciting proposals for invited sessions focusing on topics of the conference. Prospective organisers should submit proposals to the Technical Co-Chairman, Zhengguo LI, via email ezgli@i2r.a-star.edu.sg by **15 November 2005**.

Submission Format: Please submit full papers to the Conference website address <http://www.ieee.org/ICIEA2006> by **15 November 2005**. All submitted papers should be in the form of .pdf or .ps file and are to be limited to a maximum length of 6 pages (A4 size, single space, Times Roman of font size 10, two columns format), including figures, tables and references. Please use the template which is available from the website. Upon acceptance, authors will be required to register and present their papers. Papers will be published in the conference proceedings only if at least one of the authors is officially registered. Each registration covers a maximum of two papers.

Keynote Speeches

1. "Implementations of Methods of Computational Intelligence"
- Professor Bogdan 'Dan' Wilamowski, Auburn University, USA
2. "Sensorless Control of AC Machines around Zero Speed – with or without Signal Injections?"
- Professor Joachim Holtz, University of Wuppertal, Germany
3. "Complex Networks: Design and Control"
- Professor David J. Hill, Australian National University, Australia

Important Dates:

Deadline for Full Paper submission	15 November 2005
Notification of Acceptance	30 December 2005
Deadline for Camera Ready Manuscript Submission	1 March 2006
Deadline for Authors' Registration	1 March 2006

Organisers

- IEEE Industrial Electronics (IE) Chapter
- IEEE Industry Applications/Power Electronics (IA/PEL) Chapter
- IEEE Singapore Section

Technical Sponsor

- IE Society

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