



ICIEA 2007

THE 2nd IEEE CONFERENCE ON INDUSTRIAL ELECTRONICS AND APPLICATIONS

23 - 25 May 2007, Harbin, China

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The 2nd IEEE Conference on Industrial Electronics and Applications (ICIEA 2007) will be held from 23-25 May 2007, in Huaqi Hotel, Harbin, China. The Conference is organized by IEEE Industrial Electronics (IE) Chapter of Singapore Section and co-organized with Harbin Institute of Technology.

The purpose of the conference is to create a forum for scientists, engineers and practitioners throughout the world to present the latest technology advancement 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 will be solicited:

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

Computational Intelligence: Neural networks, Fuzzy systems, Genetic algorithm, Industrial applications of evolutionary computing, Industrial applications of intelligent systems.

Control Systems and Applications: 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.

Energy and Environment: Energy management and control systems, Energy recovery, Alternative and green energy, Waste management and recycling techniques, Waste water treatment techniques, Sensor technologies, etc.

Mechatronics: Robotics, Sensors and sensor fusion, Industrial vision, Motion control, Micro electromechanical systems, Integrated circuitry design and systems.

Power Electronics: Power devices and components, Power quality control, FACTS, PFC, STATCOM, 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.

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

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

Special Sessions: The Technical Program Committee is organizing special sessions on "Automation and Measurement in Cold Rolling Mills". Prospective authors can submit their papers to the Track Chair, Dr. George A. Fodor, via email george.a.fodor@se.abb.com, by 1 January 2007.

Invited Sessions: The Technical Program Committee is also soliciting proposals for invited sessions focusing on topics of the conference. Prospective organizers should submit proposals to the Technical Co-Chairman, Dr. Li Zhengguo, via email ezqli@ntu.edu.sg by 1 January 2007.

Best Paper Award: Selection of the best paper will be made at the Conference based on both the technical content and presentation. The winner will be chosen by the Technical Program Committee in consultation with the International Advisory Committee. The award will be S\$1000 (5000RMB).

Submission Format:

Please submit full papers to the Conference website address <http://www.ieee.org/iciea2007> by **15 December 2006**. 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

- "Intelligent Vehicles: Theory and Deployment"**
-Professor Petros Ioannou, University of Southern California
- "The Exhilarating Journey from Industrial Electronics to Industrial Informatics"**
- Professor Okayay Kaynak, Bogazici University
- "Future Electrical Networks: Renewable Energy Systems and its Interaction with Distributed Generation"**
-Professor Leopoldo G. Franquelo, Universidad de Sevilla
- "Advances in Lighting Electronics Technology"**
-Professor Xu Dianguo, Harbin Institute of Technology

Important Dates:

Deadline for Full Paper submission 15 December 2006
Notification of Acceptance 1 February 2007
Deadline for Camera Ready Manuscript Submission 1 March 2007
Deadline for Authors' Registration 1 April 2007