

### Organisers

- IEEE Industrial Electronics Chapter, Singapore
- Northwestern Polytechnical University, China
- IEEE Xi'an Section, China

### Technical Sponsors

- IEEE Industrial Electronics Society
- IEEE Control Systems Society
- National Natural Sciences Foundation of China
- The Institution of Engineering and Technology

### International Advisory Committee

Zheng Bao, Xidian University, China  
Bimal K. Bose, University of Tennessee, USA  
Cassandras, Christos G., Boston University, USA  
Clarence de Silva, Univ British Columbia, Canada  
David Feng, University of Sydney, Australia  
Leopoldo G. Franquelo, Sevilla Univ., Spain  
Luis Gomes, UNINOVVA, Portugal  
Graham Goodwin, Univ. of Newcastle, Australia  
Doug Gray, Adelaide University, Australia  
Yue Hao, Xidian University, China  
Bormin Huang, Univ of Wisconsin-Madison, USA  
John Hung, Auburn University, USA  
Zhong-Ping Jiang, Polytechnic Univ.  
Okay Kaynak, Bogazici Univ., Turkey  
Marian P. Kazmierkowski, Warsaw Univ. of Tech.  
Miroslav Krstic, Univ of California, San Diego, USA  
Frank Lewis, Univ of Texas at Arlington, USA  
Yuanliang Ma, NPU, China  
Romeo Ortega, LSS-Supelec, France  
Jun Min Pan, Shanghai Jiaotong Univ., China  
Francis Schmitt, ENST, France  
Rahardja Susanto, I2R, Singapore  
Tariq Samad, Honeywell  
Gang Tao, Univ. of Virginia, USA  
Jacobus Daniel van Wyk, Virginia State Univ., USA  
Changhong Wang, Harbin Inst of Tech, China  
Danwei Wang, NTU, Singapore  
Bogdan M. Wilamowski, Auburn Univ, USA  
Yirong Wu, Chinese Academy of Sciences, China  
Wei Xie, Shenzhen Univ., China  
Xinghuo Yu, RMIT, Australia  
Zhaotian Zhang, NSFC, China  
Rongchun Zhao, NPU, China  
Yixin Zhong, Beijing Univ of Post & Elec, China

### Organizing Committee

General Chair: Changyun Wen, Singapore  
General Co-Chairs: Mingyi He, China  
Wenxiang Xie, Singapore  
Chengyu Jiang, China  
Fang Lin Luo, Singapore  
Wenjian Cai, Singapore  
Baoguo Wei, China  
He Xiang, China  
Secretaries: Zhengguo Li, Singapore  
Shuai Wan, China  
International Liaisons: King Jet Tseng, Singapore  
Hong Tang, China  
Xing Zhu, Singapore  
Xiaoguang Gao, China  
Yi Li, Australia  
Fubao Wang, China  
Yan Feng, China  
Sponsorship Co-Chairs: Xiaoyun Xiong, China  
Mingyuan Li, China  
Wei Wang, China  
Jianguo Huang, China  
Zhanrong Jing, China  
Baowang Lian, China  
Local Arrangement Co-Chairs: Xuefei Yin, China  
Dan Xiang, China

### Technical Program Committee

Chair: Jing Bing Zhang, Singapore  
Co-Chairs: Zhihong Man, Malaysia  
Cheng Chew Lim, Australia  
Jianguo Huang, China  
Milos Manic, USA

### Contact:

ICIEA 2009 Secretariat  
Email: [secretariat@ieeeicicia.org](mailto:secretariat@ieeeicicia.org)  
URL: <http://www.ieeeicicia.org>

The 4<sup>th</sup> IEEE Conference on Industrial Electronics and Applications (ICIEA'09) is organized by the IEEE Industrial Electronics (IE) Chapter of Singapore, Northwestern Polytechnical University (NPU) and IEEE Xi'an section. It will be held in Xi'an, China from 25<sup>th</sup> to 27<sup>th</sup> May 2009. Xi'an, the ancient capital city of 13 dynasties known as Chang'an and with more than 3,100 years of history, records the great changes of the Chinese nation just like a living history book. Specialists and scholars regard it as an inexhaustible treasure house of literature while heads of state from many countries and people from all over the world turn their eyes to this tourist attraction, trying to broaden their knowledge of Chinese civilization.

**The Proceedings of ICIEA are included in the IEEE Xplore database and indexed by Ei Compendex and ISI Proceedings.**

ICIEA'09 is a premier conference, providing an excellent forum for scientists, researchers, engineers and industrial practitioners throughout the world to present and discuss the latest technology advancement as well as future directions and trends in Industrial Electronics. Authors are invited to submit full papers describing original research work in areas including, but not limited to,

**Industrial Informatics:** Human-machine interactions, Diagnosis and prognosis, Intelligent automation, Intelligent transportation system, Manufacturing execution systems, Networked embedded controllers, Machine-to-machine, Condition based maintenance, SOA, Multi-agent systems.

**Computational Intelligence:** Artificial neural network, Fuzzy systems, Genetic algorithm, Evolutionary computing, Machine learning, Data mining

**Control and Systems:** Adaptive and intelligent control, Hybrid control, Digital control theory and development, Robust control, Nonlinear systems and control, Process control, networked control, cooperative control, bio-control

**Energy and Environment:** Energy management and control systems, Energy distribution, storage and recovery, Alternative and green energy, Waste management, Waste treatment and recycling, Water network and security, Sensor technologies, Intelligent Micro-grids

**Mechatronics:** Robotics, Sensors and actuators, Sensor fusion, High precision motion control, Micro electromechanical systems, industrial automation, Remote operation

**Power Electronics:** Power devices and components, Power quality control, FACTS, PFC, STATCOM, Harmonic analysis and compensations, Switching circuits and power converters, Motors and drives

**Signal Processing:** Image processing, Computer vision, Bio-image processing, Audio/video processing, Data processing, Estimation and identification, Remote sensing

**Network and Communication Technologies:** Network protocols, Mobile computing, Mobile ad hoc networks, Mobile agents, Network architectures, Quality of services, Cross-layer design/optimisation, Design and performance evaluation, Traffic control, Wireless systems

**Aerospace Electronics and Information System:** Design, integration, test or analysis of electronic components and systems. Acquisition, transmission, processing, fusion, management, simulation and display of information for aerospace systems

**Invited and Special Sessions:** The Technical Program Committee is soliciting proposals for invited and special sessions focusing on topics relevant to the theme of the conference. Prospective organizers should submit proposals to the Technical Co-Chairmen, Prof Zhihong Man (Email: [man.zhihong@eng.monash.edu.my](mailto:man.zhihong@eng.monash.edu.my)) or Prof Milos Manic (Email: [misko@uidaho.edu](mailto:misko@uidaho.edu)) by 01 Jan 2009.

**Paper Submission:** Please submit full papers to the Conference website address <http://www.ieeeicicia.org> by **15 November 2008**. 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.

In addition to the technical sessions, **KEYNOTE ADDRESSES** on **the State-of-the-Art** in various tracks of **Industrial Electronics** will be delivered by

- Professor Bimal K. Bose, University of Tennessee, USA
- Professor David Dagan Feng, The University of Sydney, Australia
- Professor K.J Ray Liu, University of Maryland, USA
- Professor Yuanliang Ma, Northwestern Polytechnical University, China
- Professor Marios M. Polycarpou, University of Cyprus, Cyprus
- Professor Sigurd Skogestad, Norwegian Univ. of Science and Technology, Norway

### Important Dates:

<b>Extended Deadline for Full Paper submission</b>	<b>15 November 2008</b>
<b>Notification of Acceptance</b>	<b>15 January 2009</b>
<b>Deadline for Camera Ready Manuscript Submission</b>	<b>01 March 2009</b>
<b>Deadline for Authors' Registration</b>	<b>01 April 2009</b>

