

The 10th IEEE Conference on Industrial Electronics and Applications (ICIEA 2015) will be held during 15-17 June 2015, in Auckland, New Zealand. The Conference is organized by IEEE Industrial Electronics Chapter of Singapore, The University of Auckland, The University of Canterbury, Massey University, IEEE Singapore Section, IEEE New Zealand North/South Sections, and IEEE IES/IAS Chapter (Auckland). IEEE Industrial Electronics Society is the financial and technical sponsor. **The proceedings of past ICIEA have all been included in the IEEE Xplore database and indexed by EI Compendex and ISI Proceedings.**

ICIEA 2015 marks the 10<sup>th</sup> Anniversary of the ICIEA conferences. As a premier conference, ICIEA provides 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. **Selected papers may be recommended for publication in reputable international journals.**

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, Multi-agent systems, internet of things.

**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, Smart grid, Distribution generation and electrical vehicles, wireless power transmission

**Signal and Information Processing:** Image processing, Computer vision, Bio-image processing, Audio/video processing, Data processing, Estimation and identification, Remote sensing, Information fusion, Brain computer interface, Signal transforming and filtering, Digital system design and structures, Optimization techniques, Compressive 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, MU-MIMO systems

**Optoelectronics and Optical Communication:** Fourier optics and signal processing, All-optical networks, Nonlinear optical signal processing, Discrete optical signal processing, Fiber optics sensors, Fiber optics communications

**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 Invited Session Chairs, Prof. Fanglin Luo ([eflluo@ntu.edu.sg](mailto:eflluo@ntu.edu.sg)) or Prof. Weihai Chen ([whchenbuaa@126.com](mailto:whchenbuaa@126.com)) by the date listed in "Important Dates".

**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 Award Committee led by Prof. Wenjian Cai and Prof. Sing Kiong Nguang in consultation with the International Advisory Committee.

**Paper Submission:** Please submit full papers to the conference website at <http://www.ieeeicicia.org>. 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 (Letter 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.

### Important Dates:

<b>Deadline for Full Paper submission</b>	<b>30 October 2014</b>
<b>Deadline for Invited and Special Sessions</b>	<b>31 December 2014</b>
<b>Notification of Acceptance</b>	<b>15 February 2015</b>
<b>Deadline for Camera Ready Manuscript Submission</b>	<b>15 March 2015</b>
<b>Deadline for Authors' Registration</b>	<b>15 April 2015</b>

### Organizers

- The University of Auckland, New Zealand
- University of Canterbury, New Zealand
- Massey University, New Zealand
- IEEE Industrial Electronics Chapter, Singapore
- IEEE Singapore Section
- IEEE New Zealand North Section
- IEEE New Zealand South Section
- IEEE IES/IAS Joint Chapter, Auckland

### Financial and Technical Co-Sponsor

- IEEE Industrial Electronics Society

### International Advisory Committee

- Bimal K. Bose, Univ. of Tennessee, USA  
 G.A. Capolino, Univ. of Picardie Jules Verne, France  
 Christos G. Cassandras, Boston Univ., USA  
 Don Cleland, Massey University, NZ  
 Jan Evans-Freeman, Univ. of Canterbury, NZ  
 David Hill, Australia National Univ., Australia  
 Zhong-Ping Jiang, Polytechnic Inst. of NYU, USA  
 Zongxia Jiao, Beihang Univ., China  
 Miroslav Krstic, Univ. of California, San Diego, USA  
 Frank Lewis, Univ. of Texas at Arlington, USA  
 Bor Ren Lin, NYUST, Taiwan  
 Chun Liang Lin, National Chung Hsing Univ. Taiwan  
 Nam Ling, Santa Clara Univ., USA  
 Robert N. K. Loh, Oakland Univ., USA  
 Zhihong Man, Swinburne Univ. of Tec. Australia  
 Saeid Nahavandi, Deakin Univ., Australia  
 Muhammad H. Rashid, Univ. of West Florida, USA  
 Zoran Salcic, The Univ. of Auckland, NZ  
 Clarence de Silva, Univ. British Columbia, Canada  
 Kwanghoon Sohn, Yonsei Univ., Korea  
 Changhong Wang, Harbin Inst of Tech, China  
 Bin Wu, Ryerson Univ., Canada  
 Alexander Verl, Fraunhofer Inst., Germany

### Organizing Committee

- General Chairs**  
 Jingbing Zhang  
 Patrick Hu  
 Xiaoqi Chen  
 Serge Demidenko
- Advisor**  
 Wenjian Cai
- Financial Chair**  
 Wenxiang Xie
- Secretary**  
 Lijun Jiang  
 Duleepa Thrimawithan
- Keynote Speech Chair**  
 Wenjian Cai
- Best Paper Award Chair**  
 Wenjian Cai  
 Sing Kiong Nguang  
 Xing Zhu
- Publication Chair**  
 Udaya Madawala  
 Changyun Wen  
 Bruce Macdonald  
 Yousef Ibrahim
- Invited Session Chair**  
 Fanglin Luo  
 Kevin Sowerby  
 Weihai Chen
- Local Arrangement Chair**  
 Nirmal Nair  
 Nitish Patel

Industry and Exhibition Chair: Loreen Ozolins

### Technical Program Committee

- Chairs**  
 Zhengguo Li  
 Liqiong Tang  
 Keliang Zhou  
 Mark Andrews
- IEEE IES Liaison Officer  
 Huijun GAO, HIT, China

### Contact:

ICIEA 2015 Secretariat  
 Email: [secretariat@ieeeicicia.org](mailto:secretariat@ieeeicicia.org)  
 URL: <http://www.ieeeicicia.org>

