

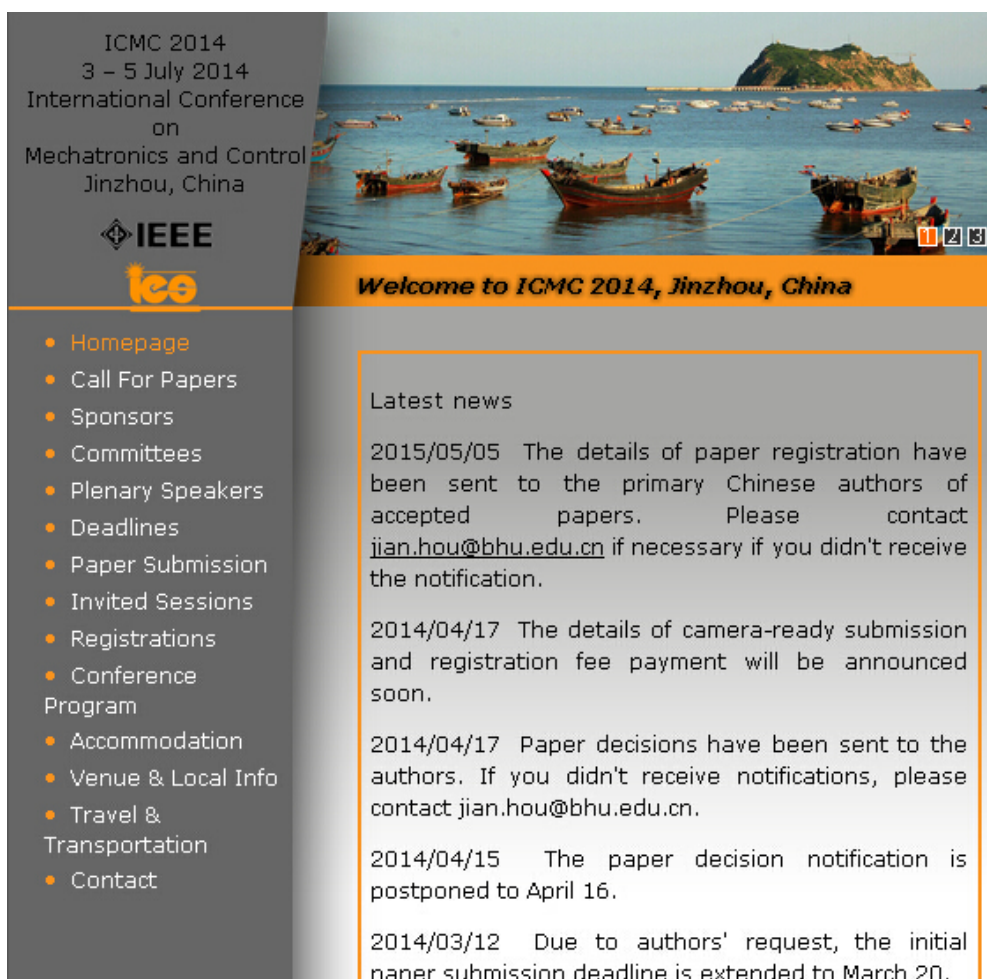
# IES DDCM TC – ISIE 2014 AdCom Report, October 10, 2014

## IEEE IES Technical Committee on Data Driven Control and Monitoring

Until October 10 2014, members of the DDCM TC have achieved the following:

### ➤ Organized conference

- ✧ The International conference on Mechatronics and Control (ICMC2014), Jinzhou, Jul. 3-5, 2014. (Technical sponsored by IES)



ICMC 2014  
3 – 5 July 2014  
International Conference  
on  
Mechatronics and Control  
Jinzhou, China

IEEE

ico

Welcome to ICMC 2014, Jinzhou, China

- Homepage
- Call For Papers
- Sponsors
- Committees
- Plenary Speakers
- Deadlines
- Paper Submission
- Invited Sessions
- Registrations
- Conference Program
- Accommodation
- Venue & Local Info
- Travel & Transportation
- Contact

Latest news

2015/05/05 The details of paper registration have been sent to the primary Chinese authors of accepted papers. Please contact [jian.hou@bhu.edu.cn](mailto:jian.hou@bhu.edu.cn) if necessary if you didn't receive the notification.

2014/04/17 The details of camera-ready submission and registration fee payment will be announced soon.

2014/04/17 Paper decisions have been sent to the authors. If you didn't receive notifications, please contact [jian.hou@bhu.edu.cn](mailto:jian.hou@bhu.edu.cn).

2014/04/15 The paper decision notification is postponed to April 16.

2014/03/12 Due to authors' request, the initial paper submission deadline is extended to March 20.

## Changes Coming for IEEE Technically Cosponsored Conferences

**D**uring the February 2014 IEEE Board of Directors Meeting Series, a motion was adopted to change the way that IEEE meetings, conferences, and events (MCE) expenses associated with conference technical cosponsorship (TCS) are allocated. Effective for TCS conferences held after 31 December 2015, for any TCS conference in which there is no (0%) IEEE financial interest, IEEE

Digital Object Identifier 10.1109/MIE.2014.2348751  
Date of publication: 19 September 2014

organizational units (OUs) that technically cosponsor the conference will be charged a fee:

- This fee will be US\$1,000 plus US\$15 per paper sent to IEEE *Xplore*.
- If multiple IEEE OUs technically cosponsor the same conference, the fee will be divided equally between the OUs.
- The fees collected will be used to reduce the MCE costs.

This charge replaces the US\$50 fee currently charged to IEEE OUs, and it replaces the US\$500 charge currently

assessed when a technically cosponsored conference does not elect to provide content from the conference to IEEE *Xplore*.

If the sponsoring IEEE OU(s) desires, it may ask MCE to bill the conference a fee (determined by the OU) for this technical cosponsorship. If the sponsoring OU elects to charge a fee to the conference, MCE will handle all billing and collection. All revenue collected by MCE from external conferences will be given to the sponsoring IEEE OU.

## ICMC 2014: A New Journey

**T**he 2014 International Conference on Mechatronics and Control (ICMC 2014) was held in Jinzhou, China, 3–5 July 2014. ICMC 2014 was technically cosponsored by

Digital Object Identifier 10.1109/MIE.2014.2348752  
Date of publication: 19 September 2014

the IEEE Industrial Electronics Society (IES) and organized by Bohai University, Beijing Aerospace Automatic Control Institute, Harbin Institute of Technology, and the IEEE Harbin Section. This conference provided a wide platform for participants to present the latest research results and

exchange ideas in the field of mechatronics, systems, and control.

Thanks to the efforts of the committee members, invited session proposers, and volunteers, ICMC 2014 attracted wide attention in the community of mechatronics and control all over the world. In total, 747 papers were



FIGURE 1 – The ICMC 2014 opening ceremony.



FIGURE 2 – Prof. Kouhei Ohnishi's plenary presentation.

submitted, and 538 were finally accepted and presented, which was an impressive achievement for a newly launched conference in mainland China. A total of approximately 400 researchers attended the conference.

After the onsite registration and reception on 3 July, the poster and oral presentations were arranged on 4–5 July at the campus of Bohai University. Four world-renowned scientists were invited to deliver plenary presentations as follows:

- Prof. Kouhei Ohnishi, Keio University, Japan: "On Force Transceiver"
- Prof. Xinghuo Yu, RMIT University, Australia: "Discontinuous Control Systems and Applications in Mechatronics"
- Prof. Richard Braatz, Massachusetts Institute of Technology: "Robust Optimal Control of Finite-Time Distributed Parameter Systems"
- Prof. Oussama Khatib, Institute of Technology, United States: "Living with Robots."

One highlight of the conference program was the panel discussion on the afternoon of 4 July. Eight

distinguished guests, including many editors-in-chief (EICs) and co-EICs, were invited together to discuss and share their opinions on high-quality paper publishing with all conference attendees. Not only did this discussion offer valuable guidance to researchers for their work, it surely also increased the influence of the IEEE IES on the volunteers of mainland China. Thanks again for the great efforts toward the excellent discussions:

- Prof. Juan Jose Rodriguez Andina, EiC of *IEEE Industrial Electronics Magazine*
- Prof. Richard D. Braatz, EiC of *IEEE Control Systems Magazine*
- Prof. Huijun Gao, co-EiC of *IEEE Transactions on Industrial Electronics*
- Prof. Luis Gomes, vice-president for technical activity of IEEE IES
- Prof. Okyay Kaynak, EiC of *IEEE/ASME Transactions on Mechatronics*
- Prof. Kouhei Ohnishi, co-EiC of *IEEE Transactions on Industrial Electronics*
- Prof. Jun Wang, EiC of *IEEE Transactions on Cybernetics*
- Prof. Xinghuo Yu, vice president for publications of IES.

All participants enjoyed delicious Chinese food together with a Northern-Chinese-style dance show performed by students from Bohai University at a banquet on the evening of 4 July. The awards for the best paper and the best student paper were also given to the authors during the banquet.

The oral and poster sessions were arranged in the administrative building and concert hall of Bohai University, where the attendees were actively involved in the presentations and discussion. ICMC 2014 was a successful event technically cosponsored by IEEE IES. As a newly launched conference, it attracted wide attention and enthusiastic participation from around the world. We hope that all attendees benefitted from ICMC 2014 and had a good time in Jinzhou.

—Huijun Gao and Shen Yin,  
ICMC 2014 General and Technical  
Program Chairs

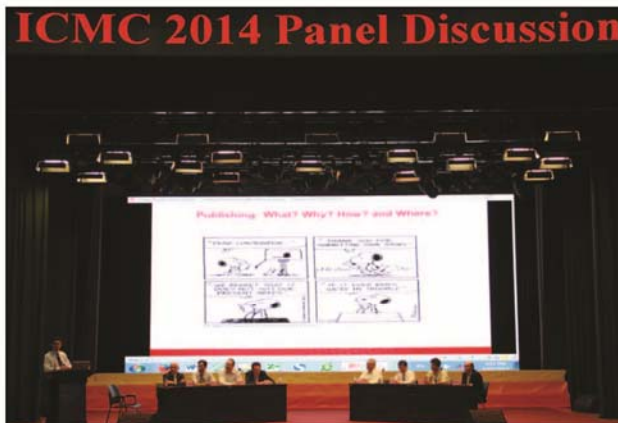


FIGURE 3 – The panel discussion.



FIGURE 4 – The ICMC banquet.

The International Conference on Mechatronics and Control has been held during 3 - 5 July 2014 in Jinzhou, China. The conference is technical sponsored by IEEE IES and organized by IEEE IES TC on Data driven control and monitoring, IEEE Harbin Section, Bohai University and Harbin

Institute of Technology, China. It aims at creating a forum for scientists, engineers and practitioners throughout the world to present the latest technology advancement in mechatronics, systems and control. In addition to the technical sessions, there are plenary talks and more than 40 special sessions. The plenary talks are offered by:

- Prof. Richard Braatz from Massachusetts Institute of Technology (MIT), USA, where he leads a research group in control theory and its applications. His talk is about “Robust Optimal Control of Finite-time Distributed Parameter Systems”.
- Prof. Oussama Khatib serves as a Professor of Computer Science at Stanford University, USA with research interests including human-centered robotics, humanoid robots, human motion understanding, haptic interaction, and human-friendly robot design.
- Prof. Kouhei Onishi from Keio University, Japan, whose research interests include electronics engineering, notably power electronics, motion control, robotics.
- Prof. Xinghuo Yu is the founding director of RMIT platform technologies research institute. His research interests include variable structure and nonlinear control, complex and intelligent systems and industrial applications. He has published over 500 refereed papers in technical journals, books and conference

proceedings

- **IES Distinguished lecture:** Prof. Xinghuo Yu, IEEE IES Distinguished lecture, will offer talks on HIT under organization of the TC and also IES Harbin section. The talk will be given on 23<sup>rd</sup> October 2014 on the topic of “Complex Networks for Control and Optimisation: From Theory to Applications”.
  
- **Teaching:** Special Topic graduate course “Recent advances on data driven control and monitoring with industrial applications” taught in fall 2013 at Harbin Institute of Technology, China (Prof. Shen YIN). Special Topic graduate course “Recent advances on optimization theory” taught in summer 2014 at Harbin Institute of Technology, China (Prof. Onder EFE). International lectures on “Embedded controller systems development” taught in fall 2014 at Harbin Institute of Technology, China (Prof. Luis Gomes).
  
- **Organized special sections in IES journals relating**

Current:

- ✧ Special Section on “Networked Control and Industrial Applications”, IEEE Trans. on Industrial Electronics, Deadline: February 28, 2015, Guest Editors: Huijun Gao, Mo-Yuen Chow,

Jianbin Qiu

- ✧ Special Section on “Mechatronics in Automotive Systems”, IEEE/ASME Trans. on Mechatronics, Deadline: July 1, 2014, Guest Editors: Huijun Gao, Umit Ozguner, Weichao Sun, Sergio Savaresi, Hong Chen, Taehyum Shim

Completed:

- ✧ Special Section on “Data driven control and process monitoring for industrial applications”, IEEE Trans. on Industrial Electronics, Guest Editors: Shen Yin, Huijun Gao, Okyay Kaynak

➤ **Organized special sections at IES conferences**

Current:

- ✧ Special Section on “Real-time monitoring and diagnostic methods and applications (INDIN2015), Organizers: Zhiwei Gao Zidong Wang and Shen Yin

Completed:

- ✧ Special Section on “Nets and Discrete Event Control Systems”, International conference on Mechatronics and Control (ICMC2014), Organizers: Luis Gomes and Shen Yin
- ✧ Special Section on “Data Driven Fault Diagnosis and Control with Industrial Applications”, ISIE2014, Organizers: Huijun Gao, Shen Yin, Steven Ding, Guang Wang

➤ **Tracks and special sessions at major IES conferences**

✧ Conferences: IECON 2013-2014, ISIE 2013-2014, ICIT 2014, ICMC2014, INDIN2015.

✧ Technical Program Chair and Co-Chairs on ISIE2014 and ICMC2014. Track Chairs on ICMC2014 and ISIE2014 and ICIT2014 etc.

➤ **Meetings**

✧ Meeting held during IECON2013, Vienna, (~15 people present, past and future activities presented/discussed)

➤ **Membership**

✧ Almost 20% membership increase compared the initial number of members (mostly IES members)

➤ **Other activities**

✧ Establish IEEE IES Harbin Chapter