25th Chinese Control Conference

The Chinese Control Conference (CCC) is one of the most important annual conferences on systems and control in China. The meeting provides a forum for scholars, engineers, and graduate students, both at home and from abroad, to exchange their newest research results and discuss their new ideas. It is also a convenient way for young Chinese researchers to learn new trends and developments from leading international researchers.

GENERAL INFORMATION

The 25th CCC (CCC06) was held 7–11 August 2006 at the International Convention Center, Harbin, China. Harbin is a beautiful summer resort city in northeast China, which is known for its Russian style buildings and ice and snow sculptures. The permanent organizer of the conference is the Technical Committee on Control Theory (TCCT), Chinese Association of Automation. This year, the local organizer was the Center for Control Theory and Guidance Technology, Harbin Institute of Technology (HIT). The conference was also cosponsored by the IEEE Control System Society (CSS), the Society of Instrument and Control Engineers (SICE), Japan, and the Institute of Control, Automation, and Systems Engineers (ICASE), Korea.

The Proceedings of the 25th CCC will be included in the IEEE Conference Publication Program. The papers included in the conference proceedings will be archived in IEEE Xplore and indexed in the international science and technology proceedings (ISTP).

TECHNICAL PROGRAMS

There were 674 submissions to this CCC, including papers from the United States, United Kingdom, Australia, Japan, Singapore, Sweden, Canada, Korea, Iran, Iraq, Romania, Hong Kong, and Taiwan. Among these submissions, 461 papers were accepted and included in the conference proceedings, published in a CD-ROM. There were 40 parallel lecture sessions (including eight invited ones) comprised of 219 papers and four poster sessions with 102 papers. In five of these lecture sessions, all papers were represented in English. For convenience, these five sessions were arranged in the same room throughout the conference. Papers in the other sessions could be presented either in English or Chinese. The newly developed CCC electronic paper submission system greatly facilitated the paper submission and review process.

New to this year’s CCC, eight program regional chairs were appointed, who were responsible for conference publicity within their regions and organizing invited sessions. The regional chairs are B. Chen, National University of Singapore, Singapore; T.W. Chen, University of Alberta, Canada; J.W. Choi, Pusan National University, Korea; M.Y. Fu, University of Newcastle, Australia; J. Huang, Chinese University of Hong Kong; G.P. Liu, University of Glamorgan, United Kingdom; Z. Lin, University of Virginia, USA; and T.L. Shen, Sophia University, Japan.

Six plenary speeches on timely topics were delivered:

» “Feedback Control of Decoherence: Systems Theoretical Approach,” by Tzyh-Jong Tarn, Washington University

» “Boundary Control of PDEs and Applications to Turbulent Flows and Flexible Structures,” by Miroslav Krstic, University of California, San Diego

» “Efficient Data Representations for Signal Processing and Control: ‘Making Most of a Little’,” by Graham Goodwin, University of Newcastle, Australia

» “A Global-Analysis Approach to Robust Control,” by Anders Lindquist, Royal Institute of Technology, Sweden

» “Advances in Convex Optimization,” by Stephen Boyd, Stanford University

» “Multi-Agent Systems with Local Rules: Toward a Theory of Analysis and Control,” by Lei Guo, Chinese Academy of Sciences, China

In this issue of IEEE Control Systems Magazine, we have two conference reports, both on meetings held in China in 2006. The 6th World Congress on Intelligent Control and Automation was held in Dalian, China, in June, while the 25th Chinese Control Conference was held in Harbin, China, in August. Both conferences reflect the high level of interest in control and automation in China and Asia.

I welcome conference reports on small and large conferences held worldwide. Please contact me at:
Zongli Lin
E-mail: zl5y@virginia.edu
PRECONFERENCE WORKSHOPS AND PRECONFERENCE SYMPOSIUM

Four preconference tutorial workshops were organized:

» “Fundamental Performance Limitations in Feedback Control,” by Jie Chen, University of California; Li Qiu, Hong Kong University of Science and Technology; and Weizhou Su, South China University of Technology

» “Networked Embedded Control Systems,” by Xiaoming Hu and Ulf Jonsson, Royal Institute of Technology, Sweden

» “Pliable, Feedback, and Cooperative Controls of Constrained Systems,” by Zhihua Qu, University of Central Florida

» “Time-delayed Feedback Control: Methodology, Stability, and Application,” by Yuping Tian, Southeast University

As a preconference symposium, the Second China-Japan Joint Workshop on Control of Nonsmooth, Switched, and Hybrid Systems was held on 6 August 2006 at the International Convention Center, Harbin. The organizers were Yu Yao of the Harbin Institute of Technology, China, and Tielong Shen of Sophia University, Japan.

AWARDS

Two awards were presented at CCC06, the 12th Guan Zhao-Zhi Award and the first Poster Award. The winning papers for the 12th Guan Zhao-Zhi Award were

» “A Unified Treatment for Controllability/Observability Problems of Partial Differential Equations of Second Order,” by Xiaoyu Fu, Sichuan University

Overseas attendees (from left) Miroslav Krstic (plenary speaker), Zhongping Jiang (chair, preconference tutorial workshops), Zongli Lin (program regional chair), and Jie Huang (program regional chair).

Yuanming Ding and Shuping Tan receive the Poster Award at CCC’06. Han-Fu Chen, member of Chinese Academy of Sciences, presents the awards.

Xiaoyu Fu and Milan Derpich receive the Guan Zhao-Zhi Award at CCC’06. Lei Guo, member of the Chinese Academy of Sciences, presents the awards.

Milan Derpich, winner of the 12th Guan Zhao-Zhi Award, sings at the banquet.

Guangren Duan and Graham C. Goodwin exercise Chinese Wushu at the Two Dragons Mountain, east of Harbin.
The winning papers for the first Poster Award were:

- “Adaptive Nonlinearity Compensation for Power Amplifiers Based on Model-Matching Approach,” by Yuanming Ding, Dalian University, and Akira Sano, Keio University
- “Optimal Adaptive Sampled-Data Based Control of Stochastic Systems with Compact Parameter Set,” by Shuping Tan, Beijing Institute of Control Engineering.

**TECHNICAL TOURS AND POST-CONFERENCE SIGHTSEEING TOURS**

The conference also organized technical and sightseeing tours. Technical visits included laboratories and centers at HIT. Many participants enjoyed a one-day city tour as well as two-day tours to Wudalianchi (Five Large Connected Pools) and the Jingpo Lake.

Finally, the conference program and activities can be found on the TCCT home page: http://tcct.amss.ac.cn and the home page for the Center for Control Theory and Guidance Technology: http://cctgt.hit.edu.cn.

The 26th CCC (CCC07) will be held in Zhangjiajie, a marvelous sightseeing destination in Hunan Province. The Web site for CCC07 is http://sise.csu.edu.cn/ccc07.

Guangren Duan
Chair, Program Committee

**The 6th World Congress on Intelligent Control and Automation**

The 6th World Congress on Intelligent Control and Automation (WCICA2006) was held in Dalian in northeastern China 21–23 June 2006. The congress venue was the Dalian Shangri-La hotel. The WCICA2006 was sponsored by Dalian University of Technology, China, and Northeastern University, China, and was technically cosponsored by the IEEE Robotics and Automation Society; the National Natural Science Foundation, China; the Chinese Association of Automation; and the IEEE Control Systems Society, Beijing Chapter. The WCICA2006 was financially supported by National Natural Science Foundation, China, Ministry of Education, China, Shanghai Baosight Software Co., Ltd., Grandar Robotics Co., Ltd., Yokogawa Electric Corporation, K.C. Wong Education Foundation, Hong Kong, and Siemens Ltd., China.

The WCICA has evolved into a biannual event and a major international control conference series held in China. The previous five congresses were successfully held in Beijing, Xi’an, Hefei, Shanghai, and Hangzhou in 1993, 1997, 2000, 2002, and 2004, respectively. The WCICA2006 aimed to provide an international forum for researchers, engineers, and professionals working in the areas of intelligent control and automation to discuss and exchange their findings, ideas, and views. The response to the call for papers of the WCICA2006 was extraordinary. There were 5,938 submissions, a number much higher than expected. The International Program Committee worked very hard and efficiently. After a rigorous review procedure, 2,224 papers (37.45%) were included in the congress proceedings published by the IEEE. These papers covered almost all areas of control and automation research. The WCICA2006 drew over 1,500 participants from 16 countries and included academic researchers and representation from industry and government. This number of participants is record breaking in the history of the WCICA.

The program for this congress included 136 sessions of oral presentations and four sessions of posters and was organized into the following simultaneous tracks: 1) Control Theory and Methods, 2) Intelligent Control, 3) Modeling and Simulation, 4) Sense and Fault diagnosis, 5) Process Control and Optimization, 6) Integrated Automation Systems, 7) Control System of Industrial Processes, and, 8) Other Applications. In addition to the regular technical sessions, there were plenary and panel discussions as well as social activities. Six leading experts in the field were invited to deliver plenary speeches: “Control over Unreliable Communication Links” by Tamer Basar, University of Illinois at Urbana-Champaign; “Innovation Initiatives Toward Year 2015” by Akira Nagashima, Yokogawa Electric Corporation, Japan; “The Multiscale Nature of Process Dynamics and Model-Predictive Control” by George Stephanopoulos, MIT; “Current NSF Robotics Developments and Activities Focusing on Robust Intelligence” by George Lee, CISE/IIS Robotics Program, NSF; “Deterministic and Real-Time Communication over Ethernet in EPA Control System” by Jian Chu, Zhejiang University, China; and “Information Integration Techniques in Automation” by Liqun Cong, Shanghai Baosight Software Co. Ltd., China.

**PANEL DISCUSSION**

Publishing quality papers in international journals is an important process for graduate students and scholars to advance their career and to increase their role in the world arena. However, many students and scholars are facing major difficulties in this endeavor, and the acceptance rate for papers by Chinese authors is lower than for papers by authors from North America, Europe, and Japan. What are the reasons? How to overcome the hurdles? What goes on after a paper is submitted and how are acceptance or rejection decisions made? What will be the roles of journals in the future? A panel discussion, “How to Publish Papers in International Journals,” was