### IEEE Control Systems Society Multiconference on Systems and Control

### **MSC 2012**

Dubrovnik, Croatia, October 3-5, 2012

The 2012 IEEE Control Systems Society Multiconference on Systems and Control (MSC) was held on October 3–5, 2012, at Dubrovnik Palace Hotel conference center in Dubrovnik, Croatia. The conference was a joint event, comprising International Symposium on Intelligent Control (ISIC) and Conference on Control Application (CCA).

#### TECHNICAL PROGRAM

The MSC 2012 was the first conference in Croatia sponsored by the IEEE CSS. Overall, 375 contributed and invited session papers from 47 countries on 6 continents were received. After peer-to-peer review process, the conference Program Chairs Ji Feng Zhang and Eric Rogers have created the Technical Program containing a total of 282 papers.

The preconference day was dedicated to workshops – Workshop on Control Design for Energy Efficient Buildings, organized by Sunil Ahuja, Veronica Adetola, Draguna Vrabie, Workshop on Systems and Synthetic Biology, organized by Graziano Chesi and Workshop on Randomization and Averaging in Estimation, Optimization and Control, organized by Oleg Granichin and Alexander Fradkov. Particularly successful was the Workshop for Middle and High School Students and Teachers, organized by Bozenna Pasik-Duncan. During the workshop, the students and teachers, helped by PhD students volunteers, had an excellent opportunity for getting hands-on experience on the robotics & control equipment provided by the ACROSS-Center for Research Excellence for Advanced Cooperative Systems and LARICS-Laboratory for Robotics and Intelligent Control Systems, both affiliated with the Faculty of Electrical Engineering and Computing, University of Zagreb.

As the part of the conference program, four plenary talks on the state-of-the-art research topics were delivered—"Control of Molecular Purity, Crystal Structure, and Particle Size Distribution in Pharmaceutical Crystallization" by Richard D. Braatz, "Bio-inspired Flying Robots" by Dario Floreano, "Adaptive Learning Structures for Real-Time Optimal Control and Graphical Games" by Frank L. Lewis, and "Predicting Epileptic Episodes? A Systems & Information Theoretic Approach" by Iven Mareels.



Prof. Dario Floreano delivers his keynote talk



MSC2012 volunteers at the welcome reception

#### SOCIAL PROGRAM AND AWARDS

It is well known that the organization of a conference is not possible without help of the student volunteers. MSC 2012 was no exception—enormous efforts and enthusiasm that our young colleagues put in organizational activities were irreplaceable. Their initiative in organization of the "Students Informal Dinner", that took place in the Old City of Dubrovnik, was accepted warmly among the MSC2012 student participants. The conference Organizing Committee is obliged to all of them.

The conference participants – many of them with their families – enjoyed in the conference banquet that took place at the conference venue. The banquet program included a set of folk dances from the Dubrovnik region, performed by the local dance group, and folk music, performed by the group Kase from Dubrovnik. Two awards have been presented during the banquet program. Prof. Graziano Chesi, who was the Best Student Paper Award



IEEE CSS President-elect Prof. Yutaka Yamamoto (1st from left) and keynote speaker Prof. Iven Mareels (2nd from left) with members of the conference Organizing Committee, Prof. Stjepan Bogdan, Prof. Bozenna Pasik-Duncan, Prof. Veysel Gazi, and Prof. Eric Rogers (from left to right)

(BSPA) Chair, announced that, based on the evaluation of the MSC2012 BSPA committee, the recipient of the Best Student Paper Award was Gian Antonio Susto. The second laureate was Prof. Richard D. Braatz who received the 2011 Transition to Practice Award for his significant contribution to the control of crystallization processes in the pharmaceutical industry. Both awards have been presented by the IEEE CSS president-elect Prof. Yutaka Yamamoto.

#### CONCLUDING WORDS

Listening to the comments of the people during and after the conference, I hope that most of them enjoyed in very interesting and scientifically challenging sessions. I also hope that the fact that the MSC2012 conference was held in one of the most beautiful cities in the world helped to make this conference even more memorable and inspiring.

Prof. Stjepan Bogdan Ph.D., General Chair University of Zagreb Faculty of Electrical Engineering and Computing

# **Electrical Drives** and

## **Power Electronics**

October 2-4, 2013, Dubrovnik, CROATIA

# **EDPE 2013**











The conference is jointly organized by:

- **KoREMA** Croatian Society for Communications, Computing, **Electronics, Measurement and Control**
- **FER** University of Zagreb,

Faculty of Electrical Engineering and Computing.

- **Technical University of Kosice** FEI TU
- SES Slovak Electrotechnical Society
- ACROSS Centre of Research Excelence Advanced **Cooperative Systems**

EDPE 2013 is 6<sup>th</sup> joint conference and Topics include (but are not limited to): continues successful cooperation ofCroatian and Slovakian scientists in organizing EDPE conferences.

The EDPE 2013 conference through its technical program will provide a unique opportunity for the academic and industrial community to address new challenges, share experiences and discuss future research trends. A broad range of topics is proposed, following current trends in the field of electric drives, power electronics and their applications.

- Power Electronics and *Applications* – semiconductor devices, converters, control, thermal design, modeling and simulation ...
- Electrical Drives and Machines design (CAD), control, sensors, modeling and simulation ...
- *Application of Drives* robotics, mechatronics, vehicles, multimotor systems ..
- Education
- Other related topics

More detailed information regarding deadlines, paper submission procedure, registration fees, the conference venue, can be found on the conference website:

www.edpe2013.fer.hr