From the REV2008 Conference Chair

Remote solutions based on Internet technology are being increasingly deployed in numerous areas of research, science, medicine and education. With the further growth in Internet access, increasing bandwidth and improved security, remote technologies (RT) will continue to spread and will form a key factor in the efficient use of a globalized ICT. Examples of RT include remote engineering, remote service and diagnosis, telemedicine and telemonitoring, remote control, remote training labs and telerobotics.

The Department of Electrical Engineering of the Düsseldorf University of Applied Sciences organized this year's international conference "Remote Engineering & Virtual Instrumentation" (REV 2008) from June 23rd to June 25th 2008.

New solutions, findings and applications for online experiments & remote labs on all topics ranging from telemedicine and telerobotics to virtual instrumentation, remote visualization and learning in 3D were presented in a total of 52 scientific lectures and 24 poster presentations in four concurrent sessions on the 24th and 25th of June. 104 participants from 30 countries and 6 continents took part in the conference.

The entire day of June 23rd was dedicated to various workshops and tutorials. This included, for example, a workshop on the application of augmented reality for the development of mechatronic systems, and a tutorial on current tools for developing control systems.

Interested participants were able to discuss new ideas for EU project proposals in two separate EU proposal workshops. Given the simplified inclusion of non-EU countries into the EU projects of the 7th general programme, the Düsseldorf Telelaboratory roused great interest among the conference participants with its speech suggesting the establishment of a European Center for Remote Technology (EUREMOTE) that will also include non-EU countries.

Practical demonstrations of web-controlled mobile systems (robot, zeppelin) complemented the theoretical speeches, and were food for a great deal of shop talk. Another event was Burapha University's remote presentation in Thailand on the first conference day.

Some of the speeches were webcast live to the Internet. The recorded speeches are also still available from the programme page on the REV website (www.rev-conference.org).

Keynote speakers included:

- Prof. Dr. Lambertus Hesselink of Stanford University (USA) with a speech on secure remote collaboration in small groups;
- Prof. Dr. Guoxing Huang of East China Normal University (China) with a speech on the development of remote education in China; and
- Dr. Maite Mijares Pisano of the Ecuadorian Foundation for Telemedicine and eHealth (Ecuador) with a speech on the limits of telemedicine in regions of weak infrastructure.

REV 2008 was actively supported by renowned international companies (National Instruments, Yokogawa) and German companies (Bayer Technology Services, BeckIPC, Phoenix Contact, Siemens, SMS-Demag, Wiesemann&Theis) in the form of sponsorship, provision of exhibition stands and collaboration on the programme and with the organization committee.

Aside from a thrilling scientific & technological programme, the conference also presented an opportunity to socialize and establish ties during the accompanying events from the 22nd to the 24th of June. These included, among other things, a tourist excursion to the Drachenfels

mountain in Königswinter and a conference dinner during a boat cruise on the river Rhine around Düsseldorf.

This special issue of iJOE gives a brief insight into the technical diversity of the fascinating solutions for remote technology that were presented at the REV 2008 in Düsseldorf.

I know you will enjoy reading and making new discoveries in this issue, and I am sure you are already looking forward just as much as I am to the next REV 2009 in Bridgeport, USA.

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