

CENICS 2011

Foreword

The Fourth International Conference on Advances in Circuits, Electronics and Micro-electronics (CENICS 2011), held between August 21-27, 2011 in Nice/Saint Laurent du Var, France, continued a series of events initiated in 2008, capturing the advances on special circuits, electronics, and micro-electronics on both theory and practice, from fabrication to applications using these special circuits and systems. The topics cover fundamentals of design and implementation, techniques for deployment in various applications, and advances in signal processing.

Innovations in special circuits, electronics and micro-electronics are the key support for a large spectrum of applications. The conference is focusing on several complementary aspects and targets the advances in each on it: signal processing and electronics for high speed processing, micro- and nano-electronics, special electronics for implantable and wearable devices, sensor related electronics focusing on low energy consumption, and special applications domains of telemedicine and ehealth, bio-systems, navigation systems, automotive systems, home-oriented electronics, bio-systems, etc. These applications led to special design and implementation techniques, reconfigurable and self-reconfigurable devices, and require particular methodologies to be integrated on already existing Internet-based communications and applications. Special care is required for particular devices intended to work directly with human body (implantable, wearable, ehealth), or in a human-close environment (telemedicine, house-oriented, navigation, automotive). The mini-size required by such devices confronted the scientists with special signal processing requirements.

We take here the opportunity to warmly thank all the members of the CENICS 2011 technical program committee as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and efforts to contribute to the CENICS 2011. We truly believe that thanks to all these efforts, the final conference program consists of top quality contributions.

This event could also not have been a reality without the support of many individuals, organizations and sponsors. We also gratefully thank the members of the CENICS 2011 organizing committee for their help in handling the logistics and for their work that is making this professional meeting a success.

We hope the CENICS 2011 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the area of circuits, electronics, and micro-electronics.

We hope Côte d'Azur provided a pleasant environment during the conference and everyone saved some time for exploring the Mediterranean Coast.

CENICS 2011 Chairs

Advisory Chairs

Vladimir Privman, Clarkson University - Potsdam, USA

Sergey Y. Yurish, Technical University of Catalonia (UPC-Barcelona), Spain

Martin Horauer, University of Applied Sciences Technikum Wien, Austria
Adrian Muscat, University of Malta, Malta

Research/Industry Chairs

Ravi M. Yadahalli, PES Institute of Technology & Management - Karnataka, India

Industry Liaison Chairs

Falk Salewski, Lacroix Electronics, Germany

Special Area Chairs

Formalisms

Peeter Ellervee, Tallinn University of Technology, Estonia

Application-oriented

Josu Etxaniz Marañon, University of the Basque Country / Universidad del País Vasco / Euskal Herriko Unibertsitatea - Bilbao, Spain

Sensors

Yulong Zhao, Xi'an Jiaotong University, China