

CENICS 2017

Forward

The Tenth International Conference on Advances in Circuits, Electronics and Micro-electronics (CENICS 2017), held between September 10-14, 2017 in Rome, 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 covered 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 was 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.

The conference had the following tracks:

- Design, models and languages
- Electronics technologies
- Reconfigurable Architectures, Tools and Applications
- Cyber-Physical Security

We take here the opportunity to warmly thank all the members of the CENICS 2017 technical program committee, as well as all the reviewers. The creation of such a 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 effort to contribute to CENICS 2017. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

We also gratefully thank the members of the CENICS 2017 organizing committee for their help in handling the logistics and for their work that made this professional meeting a success.

We hope that CENICS 2017 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the field of circuits, electronics and microelectronics. We also hope that Rome, Italy provided a pleasant

environment during the conference and everyone found some time to enjoy the historic charm of the city.

CENICS 2017 Chairs

CENICS Steering Committee

Falk Salewski, Muenster University of Applied Sciences, Germany

Chun-Hsi Huang, University of Connecticut, USA

Marc Sevaux, Université de Bretagne-Sud, France

Vladimir Privman, Clarkson University - Potsdam, USA

Diego Ettore Liberati, National Research Council of Italy, Italy

Julio Sahuquillo, Universitat Politècnica de València, Spain

Sergei Sawitzki, FH Wedel (University of Applied Sciences), Germany

Manuel José Cabral dos Santos Reis, University of Trás-os-Montes e Alto Douro, Portugal

Bartolomeo Montrucchio, Politecnico di Torino, Italy

Petr Hanáček, Brno University of Technology, Czech Republic

CENICS Research/Industry Committee

John Vardakas, Iquadrat Informatica, Barcelona, Spain

Laurent Fesquet, TIMA laboratory | Grenoble Institute of Technology, France

Christian Wögerer, PROFACTOR GmbH, Austria

Miroslav Velez, Aries Design Automation, USA

Ivo Stachiv, Institute of Physics | Czech Academy of Sciences, Prague, Czech Republic / Harbin

Institute of Technology | Shenzhen Graduate School, Shenzhen, China

Amir Shah Abdul Aziz, TM Research & Development, Malaysia