SENSORDEVICES 2013

Foreword

The Fourth International Conference on Sensor Device Technologies and Applications [SENSORDEVICES 2013], held between August 25-31, 2013 in Barcelona, Spain, continued a series of events focusing on sensor devices themselves, the technology-capturing style of sensors, special technologies, signal control and interfaces, and particularly sensors-oriented applications. The evolution of the nano-and microtechnologies, nanomaterials, and the new business services make the sensor device industry and research on sensor-themselves very challenging.

SENSORDEVICES 2013 also featured the following workshop:

- WISH 2013, The Third International Workshop on Intelligent Sensor Hub

We take here the opportunity to warmly thank all the members of the SENSORDEVICES 2013 Technical Program Committee, as well as the numerous 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 who dedicated much of their time and efforts to contribute to SENSORDEVICES 2013. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the SENSORDEVICES 2013 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success. We hope that SENSORDEVICES 2013 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the area of sensor device technologies and applications.

We are convinced that the participants found the event useful and communications very open. We hope Barcelona provided a pleasant environment during the conference and everyone saved some time for exploring this beautiful city.

SENSORDEVICES 2013 Chairs:

SENSORDEVICES Advisory Chairs

Sergey Yurish, IFSA - Barcelona, Spain Petre Dini, Concordia University, Canada / China Space Agency Center, China Elena Gaura, Coventry University, UK Vittorio Ferrari, Università di Brescia, Italy

SENSORDEVICES 2013 Research/Industry Chairs

Raluca - Ioana Stefan-van Staden, National Institute of Research for Electrochemistry and Condensed Matter, Bucharest, Romania Alberto Yúfera, Centro Nacional de Microelectronica (CNM-CSIC) - Sevilla, Spain

SENSORDEVICES Special Area Chairs

Ultrasonic and piezoelectric sensors

Thomas Herzog, Fraunhofer Institute for Non-Destructive Testing IZFP - Dresden, Germany Henning Heuer, Fraunhofer Institute for Non-Destructive Testing IZFP - Dresden, Germany **Optical sensors**

Vítor Carvalho, Minho University, Portugal

Irinela Chilibon, National Institute of Research and Development for Optoelectronics - Bucharest, Romania

Gas sensors

Dongfang Yang, National Research Council Canada - London, Canada

Nanosensors

Marco Tartagni, University of Bologna - Cesena, Italy

Testing and validation

Ksenia V. Sapozshnikova D.I. Mendeleyev Institute for Metrology - St. Petersburg, Russia

Vibration sensors

Subodh Kumar Singhal, National Physical Laboratory, New Delhi, India