

# SENSORDEVICES 2014

## Foreword

The Fifth International Conference on Sensor Device Technologies and Applications (SENSORDEVICES 2014), held between November 16-20, 2014 in Lisbon, Portugal, 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.

We take here the opportunity to warmly thank all the members of the SENSORDEVICES 2014 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 2014. 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 2014 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success. We hope that SENSORDEVICES 2014 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 Lisbon provided a pleasant environment during the conference and everyone saved some time for exploring this beautiful city.

### **SENSORDEVICES 2014 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 2014 Research/Industry Chairs**

Raluca - Ioana Stefan-van Staden, National Institute of Research for Electrochemistry and Condensed Matter, Bucharest, Romania

Alberto Yúfera, Centro Nacional de Microelectrónica (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. Sapozhnikova D.I. Mendeleev Institute for Metrology - St. Petersburg, Russia

### **Vibration sensors**

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