Preface

The 3rd International Conference on Materials and Applications for Sensors and Transducers, Prague, Czech Republic, hosted about 320 oral and poster papers and more than 200 participants. IC-MAST as an international annual conference which tries to meet the needs for various types of sensors, particularly those ones which may be manufactured by low cost methods (i.e. hybrid sensors, smart specialization devices, particular applications not necessarily requiring integrated micro-nano technologies), covering all types of materials and physical effects, appears to be a necessity. IC-MAST has been established as a high quality international conference by:

I. Gathering together multinational researchers from all over the world, working in different materials for sensors and transducers and technical applications of sensors, but also in some cases in the management of the data coming from sensors and transducers; the careful selection of the conference place allows (like Aegean Sea, Budapest, Prague etc) allows for enjoying the local hospitality and sightseeing
II. Emphasizing in hybrid sensors and smart specialization devices produced by inexpensive methods, without excluding of course micro-nano technology, from all kinds of solid state, liquid and gaseous materials, as well as in particular transducer applications (design and development, as well as use of sensing data)
III. Publishing the conference proceedings in the form of 4-page papers in a compact volume of Key Engineering Materials which has a certain large impact in CPSI, while long versions of complete research articles are subject of publication in Sensor Letters and the Journal of Optoelectronics and Advanced Materials, both ISI Journals
IV. Innovatively implementing the Virtual Paper Concept, allowing for large impact of research works presented in the conference by authors who either have no time or no funding support for visiting a conference; this year more than 30 virtual papers are presented in the 3rd IC MAST, following a standardized procedure via the our robust and reliable Conference Site (www.icmast.net)
V. Allowing for lengthy technical and managerial discussions in terms of sensor, material and instrumentation development; furthermore, the different research groups gathered together are offered the particular advantage of arranging and concluding research proposals and projects, otherwise not having a visible possibility of such realization

The 3rd IC-MAST organizing committee is proud that the Conference Keynote Speaker was **Professor Ulrich Schmid,** Technische Universität Wien.

We are also proud for the invited speakers of the conference:

- **Professor Ampere A. Tseng,** Arizona State University, Tempe, Arizona USA and Visiting Professor, Faculty of Mechanical Engineering, Brno University of Technology.
- **Professor Bingqing Wei,** University of Delaware.

The IC-MAST 2013 organizers believe that the target of the Conference has been successfully met by enhancing knowledge in sensors by all participants, accelerating the achievement of results and optimizing the under design products, in a quite friendly way! Therefore, participants made an appointment for the next year in Madrid, where the 4th International MAST Conference will be realized!

The Conference Chairmen

Evangelos Hristoforou
National TU of Athens

Dimitrios Vlachos
University of Peloponnese

Scientific Committee

- **Spyridon Diplas,** Sintef Oslo, Norway
- **Mihai Popescu,** Editor-in-Chief, Journal of Optoelectronics and Advanced Materials
- **Peter Svec,** Slovak Academy of Sciences
- **Horia Chiriac,** National Institute for R&D in Technical Physics, Iasi, Romania
- **Roberto Germano,** Promete, Naples, Italy
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- **Christophe Dolabdjian,** University of CAEN, France
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- **Saci Messaadi,** Université de Batna, Algeria
- **Nico Avdelidis,** TWI, UK
- **Faramarz Hossein-Babaei,** K.N. Toosi University of Technology, Iran
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- **Athouël, Laurence, Dr.,** IMN-CNRS, University of Nantes, France
- **Gascon, J.,** Catalysis Engineering / Delft University of Technology
- **C.N.R. Rao,** Jawaharlal Nehru Centre for Advanced Scientific Research, India
- **Jon Gutiérrez,** Universidad del País Vasco UPV/EHU, Spain
- **Damianos Sakas,** University of Peloponnese, Greece