

# "ISOCS-MiNaB-ICT-MNBS" Joint Event on

"Sensing for Smart Anything Everywhere: Materials, Technologies, Applications"

25-29 June 2016 - Otranto (Lecce), Italy







### http://www.minabict.eu

## CALL FOR PAPERS

#### General Chairs

- K. Persaud, Univ. of Manchester (UK)
- J. Gardner, Univ. of Warwick (UK)
- P. Siciliano, IMM-CNR, Lecce (IT)
- L. Lorenzelli, FBK-CMM, Trento (IT)

#### **Programme Chair**

L. Francioso, CNR-IMM, Lecce (IT)

Tutorial Chair A. Gutiérrez-Gálvez, Un. Barcelona(SP)

#### Scientific Committee

N. Abbate, ST Microelectronics (I)

#### A. Adami FBK-CMM, (Italy)

- T. K. Bhattacharyya,
- Indian Institute of Technology Kharagpur F. Baldini, IFAC-CNR, (Italy)
- D. Briand, EPFL, (CH)
- Cohrini /
- S. Cabrini, Lawrence Berkeley Nat. Lab USA C. Cane', CNM-CSIC, (ES)
- A. Cusano, University of Sannio (I)
- A. Cusario, University of Samilo
- P. Dario, SSSP (Italy)
- C. Di Natale, Uni. Tor Vergata (I)
- R. Guenzler, HSG-IMIT (D)
- R. Guttierez-Osuna, ISOCS (USA)
- L. Lechuga, Nanoscience Catalan Inst. (ES)
- A. Lilienthal, ISOCS (Sweden)
- A. Lymberis, European Commission
- S. Longhi, Uni. Politecnica. Marche, (IT)
- G. Malliaras, EMSE (FR)
- S. Marco, Uni. Barcelona, (ES)
- J. Mitrovics, ISOCS (D)
- F. Quaranta, IMM-CNR, (IT)
- I. Raptis, Demokritos (Gr)
- M. Rossi, NanoItaly-Univ. La Sapienza (I)
- E. Smela, University of Maryland , USA
- L. Sarro, TU-Delft (NL)
- C. Tsamis, "Demokritos" (GR)
- G. Urban, IMTEK (D)
- A. Vasiliev, Univ.Moscow (RU)
- M. J. Vellekoop, University of Bremen (D)

#### Local Technical Committee:

- S. Conoci, ST Microelectronics, Catania
- I. Farella, IMM-CNR, Lecce
- A. Leone, IMM-CNR, Lecce
- S. Libertino IMM-CNR, Catania
- G. Maruccio, University of Salento
- A. Persano, IMM-CNR, Lecce
- M. A. Signore, *IMM-CNR*, *Lecce* A. Taurino, *IMM-CNR*, *Lecce*
- Local Organising Committee

#### A. Campa, IMM-CNR, Lecce

- A. Carbone, IMM-CNR, Lecce
- A. Caroppo, IMM-CNR, Lecce
- F. Casino, IMM-CNR, Lecce
- P. Cretì, IMM-CNR, Lecce
- C. Martucci, IMM-CNR, Lecce
- E. Melissano, IMM-CNR, Lecce

Following the interest and the success of 2015 edition of **MiNaB-ICT** (Micro-Nano-Bio-ICT convergence), in 2016 a **Joint event with The International Society on Olfaction and Chemical Sensing (ISOCS) and the European Commission** will be organised, focussing the attention on **Sensing for the emerging world of "Smart Anything Everywhere"**. In this context, Sensors and Smart Systems devices that provide particular intelligent functionality by combining micro/nano-electronic components with physical, chemical, and biological sensors and actuators on fully integrated systems, will catalyse increasing technology development for a broad range of powerful applications addressing societal challenges.

These rapid technological developments have contributed to the growth in many areas of the research (health, food, environment, etc.) where they can bring significant impact.

Moreover, the inclusion of sensors on smart systems that combine many functionalities with the ubiquitously sharing of information through networks is also receiving particular attention.

However, in order to take full advantage of current technologies, greater effort is needed to improve the link between Sensors & Smart Systems in a new concepts of Information Communication Technology. The full integration with ICT data processing to be combined with sensing, reasoning, actuating and communication and will allow analysis of complex situations, to take autonomous decisions, to interact with the environment and with other "intelligent" systems.

The event will consist of a Scientific Workshop in the days 27-29 June and a Tutorial Course in the days 25-26 June. Furthermore, the workshop will host this year's *Concertation and Consultation Workshop of European Commission (EC)'s* on Micro-Nano-Bio systems cluster.

The objective of the workshop is twofold: a) to share the progress in the field and b) to identify the technological orientation and future challenges, offered by the connection between Sensors and ICT technologies, looking at the world of **"Smart Anything Everywhere"**, starting from basic materials and technologies for sensors and looking towards integration and applications. The involvement of representatives of key research disciplines will offer a podium to enable community building and networking, the sharing of progress in materials, technology and application development, and the identification of common interests.

The distance to market, the translation of a technology success into a market success, and how it is reflected on the Horizon 2020 programs and opportunities will be discussed in a specific session of the workshop.

#### TOPICS

Subject matters of the workshop will include but will be not limited to:

- New materials and advanced technologies for physical/chemical/bio-sensors and Smart Systems Integration
- New Sensing and Transduction Methodologies and Devices
- MEMS/NEMS
- Bio-electronics and Bio-photonics
- Micro-nano actuation and micro-nano robotics
- Energy Harvesting
- Lab-on-a-chip & Micro-Nano-fluidics
- Bio-inspired electronics and neural system architectures
- Bio-signals processing
- Wearable and implantable sensors and devices and other miniaturized systems interacting with the human body
- Point-of-care diagnostics and therapy
- Printed, flexible, biodegradable and biocompatible electronics
- Sensors for Smart Objects & Internet of Things (IoT)
- Robotics and Automation
- · Sensor networks and UAVs based remote sensing
- Next Generation Communication Networks
- Information management system and mobile service technology
- Large data set management
- Tele-medicine, Tele-assistance and Tele-rehabilitation
  - Devices and Technologies for Smart Living
- Application in: Health, Food, Security, Aerospace, Automotive, Ambient Assisted Living, Environment, Domotics and Smart Home, Smart Cities and Communities, etc.
- Others



# "ISOCS-MiNaB-ICT-MNBS" Joint Event on

"Sensing for Smart Anything Everywhere: Materials, Technologies, Applications"

25-29 June 2016 - Otranto (Lecce), Italy







### http://www.minabict.eu

## CALL FOR PAPERS

#### Secretary and Organisation Contacts

A.Florio, IMM-CNR, Lecce S. Vincenti, IMM-CNR, Lecce

Roma Multiservizi S.r.l. Phone:+39 0832 231822 Fax:+39 0832 231822 info@romamultiservizi.com

The workshop is organized around oral and poster sessions, and plenary/thematic discussions. The accepted papers will be invited to be re-submitted for the publication in a Scientific Journal.

#### TUTORIAL COURSE

The programme of the workshop includes a Tutorial Course on "Distributed Chemical Sensing for Remote Environmental Monitoring" for PhD students and young researches that will be organised by ISOCS. This Course, as integrated part of the workshop, will be held on 25-26 June.

#### PAPER SUBMISSION

The workshop will allow only electronic submission of papers in PDF. Papers must be submitted in their final version following the web site format. They should not exceed 2 A4 pages, including pictures and references. The size of the submitted PDF files must not exceed 2 MBytes. Manuscript guidelines as well as instructions on how to submit electronically will be available on the Workshop web site www.minabict.eu

- Abstract submission deadline: March 31, 2016
- Author Notification: April 30<sup>th</sup>, 2016 Final Paper Submission deadline: after the end of the Workshop

The complete workshop program will be published on the conference web site within May 2015

#### LOCATION

The Workshop will take place at "Hotel Basiliani Resort" in Otranto: www.basilianiresort.com/en

