



MiNaB-ICT

International Workshop on "Micro-Nano-Bio-ICT Convergence" Current Research and Future Trends 13/15 July 2015 – Otranto (Lecce), Italy



<http://www.minabict.eu>

CALL FOR PAPERS

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Worldwide, scientific and technological research to develop, manufacture and sell systems that employ nano- and micro-structures is at the forefront of economic competition. In this context, Micro-Nano-BioSystems (MNBS) devices that provide peculiar intelligent functionality by combining microelectronic components with physical, chemical, and biological sensors and actuators on fully integrated systems, envisage an increasing technology development on a broad range of powerful applications addressing societal challenges.

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

Moreover, the inclusion of MNBS on systems that combine biological functionality with the ubiquitously sharing of information through networks is also receiving particular attention.

Nevertheless, in order to take full advantage of the current technologies, more efforts have to be addressed to improve the link between MNBS and a new concept of Information Communication Technology. The fully integration of MNBS and ICT will allow to combine data processing with sensing, reasoning, actuating and communication and will allow to analyse complex situations, to take autonomous decisions, to interact with the environment and with other "intelligent" systems.

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 MNB and ICT technologies. The involvement of representatives of key research disciplines will offer a podium to enable community building and networking, the sharing of progress in both 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 will be discussed in a specific session of the workshop.

TOPICS

The workshop is organized around oral and poster sessions, and plenary/thematic discussions.

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

- New materials and advanced technologies for sensors and Smart Systems Integration
- MEMS/NEMS
- Bio-Photonics
- Micro & nano actuation
- Energy Harvesting
- Lab-on-a-chip & Micro-Nano-Optofluidics
- 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
- Printed, flexible, biodegradable and biocompatible electronics
- Sensors for Smart object & Internet of Things
- Sensor networks and UAVs based remote sensing
- Big data management
- Application in: Health, Food, Ambient Assisted Living, Environment, etc.

The accepted papers will be invited to be re-submitted for the publication on a Scientific Journal.

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: April 10, 2015
- Author Notification: May 15, 2015
- 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