



# IWASI 2015

6<sup>th</sup> IEEE International Workshop on  
Advances in Sensors and Interfaces  
18/19 June 2015 – Gallipoli (Le), Italy

<http://iwasi2015.poliba.it>



## CALL FOR PAPERS

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The [International Workshop on Advances in Sensors and Interfaces](#) is a premier Sensors and Interface design Workshop aimed at bridging the gap between electronic design and integrated circuit technologies, processes, and manufacturing to achieve design quality in sensors developments and in electronic interfaces. The conference provides a network to present and exchange ideas, promoting research, development, and applications in a wide range of sensor and interface fields. The workshop theme spans from biomedical, chemical, high-energy physics and space/automotive sensors to their interfaces in harsh and heterogeneous environments and sensor networks.

The 6<sup>th</sup> edition specially focuses on healthcare applications and on the wide range of neuromorphic and neuro-inspired monitoring areas, including neural wireless sensor networks architectures, and software design for neural-networks modeling. In this frame, several technological challenges are still waiting to be overcome. Examples include ultra-low-power and low-noise solutions, real-time signal processing, big data management, energy harvesting and formal neural-network models. The impact of these innovations on the society is staggering, considering the wide range of potential applications: from prosthesis/artificial limbs control, fall prevention/detection systems and feeling awareness to learning machines and Brain Machine Interfaces.

The [6th IEEE International Workshop on Advances in Sensors and Interfaces](#) aims to provide a forum for experiences and knowledge sharing among international experts actively involved in research, development and experimentation of novel concepts, theoretical methods/models and experimental analysis, as well as in testing techniques for micro- and nano-sensor systems, and in the wide field of neuroelectronics and neurocomputing.

### TOPICS:

Papers are solicited – but are not limited - in the following and related topics:

- Sensor networks in biomedical, biotelemetrical and environmental applications
- Novel health-care systems and applications
- New materials and new technologies for sensors
- Printed, flexible, biodegradable and biocompatible electronics
- Novel testing and modeling techniques for sensors systems
- Sensors for aerospace and automotive applications
- High Energy Physics Experiments
- Neuro-inspired electronics and neural system architectures for brain activity monitoring
- Predictive study of neural signals related to subjects' activity
- Brain computer interface-oriented software tools and architectures
- Formal neural-network models
- Big data management
- Simulation Infrastructures in neurocomputing
- Bio-signals real time post-processing: tools, methods and experimental results
- Noise and artifacts rejection techniques in hardware design and signal processing

The accepted papers will be included in the IEEE proceedings and available on IEEEXplore. A selection of papers will be invited to be submit contributions for a special issue in the IEEE Sensors Journal.

### PAPER SUBMISSION :

The IWASI 2015 workshop will allow only electronic submission of papers in PDF. Papers must be submitted in their final version following the IEEE format. They must be double column and should not exceed six A4 pages with all illustrations and references included. The size of the submitted PDF files must not exceed 2 MBytes. Manuscript guidelines as well as instructions on how to submit electronically are available on the conference web site.

- Paper submission deadline: April 10, 2015
- Author Notification: May 08, 2015
- Final Paper Submission deadline: May 29, 2015

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