## **Call for Papers**

## **Wireless Sensor Systems Workshop 2015**

(WSSW'15)

(Collocated with the IEEE WiSEE 2015 Conference)

New smart sensing and actuating applications in *space and other extreme environments* (SEE) are fuelling the need for innovative wireless sensing systems. These challenging environments are typically characterised by highly dynamic and unpredictable operating conditions, calling for new solutions based upon autonomous operation and embedded intelligence. There is a huge opportunity to apply our knowledge and capabilities to these demanding applications, and with the appropriate vision, superior solutions will emerge to support the use of wireless sensing systems in *unconventional environments* (UE) including space, underwater, underground, and other hostile and inaccessible environments.

This workshop is a unique opportunity for specialised researchers and developers to share knowledge and exchange ideas on multi-faceted technologies required for the deployment of wireless sensing systems in unconventional environments

## **WORKSHOP SCOPE**

This workshop welcomes contributions in both forms of research papers and surveys of recent developments, new solutions, and research challenges for innovative wirelessly distributed sensor systems applicable to *unconventional environments*.

Papers are encouraged on, but not limited to, the themes and topics in the following areas:

- Conceptual understanding and challenges of UE in wireless sensing and actuating
- New unstructured sensor networking, routing, relaying, and access for the UEs
- Resilient architectures for using smart sensing and actuating systems for the UEs
- Development of environmentally proven, autonomous, and intelligent systems for monitoring and surveillance in the UEs
- Adoption of embedded software, intelligence and multi-agent systems for the UEs
- Cooperative sensing, actuation, clustering, and beam-forming for the UE
- Spectrum sensing and dynamic spectrum sharing for the UE
- Innovative sensing and intelligent interactive robotic designs for deep space, arctic, deserts and other UEs
- Integrated agile and dynamic sensors, actuators, accelerators, barcodes, and the Internet-of-Things (IoT) in the UEs
- Scarce-resource management, energy harvesting, and ambient technologies for the UEs
- Smart sensors for underwater, underground, and seismic sensing and monitoring
- Applications of data mining and Big Data processes for the UEs
- Understanding and modelling the Human Body Channel for Sensor Communication and Localization of embedded sensing devices

Prospective authors are invited to submit a full-length research (maximum 6 pages) reporting original research. All papers will be reviewed by at least three members of the Workshop Technical Program Committee.

http://sites.ieee.org/wisee/authors-information/manuscript-preparation-and-submission/

Paper Submission Deadline July 15
Acceptance Notification Sept 1
Early Registration Sept 15

Similar to our 2013 Workshop, <u>WSSW'13</u>, this Workshop will also start with a Prestigious Keynote Speech, followed by Workshop selected papers presented on the first day of <u>WiSEE 2015 Conference</u>.

Any enquiries relating to this Workshop should be directed to the workshop chairs:

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