

Call for Contributions

1. Inform the Chair: with the Title of your Contribution

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ALLSENSORS+2018+Special>

Please select Track Preference as **AgrSensApps**

Special track

AgrSensApps: Agricultural Sensors and Their Applications

Chair and Coordinator: Prof. Dr. Paulo E. Cruvinel, Embrapa Instrumentation, Brazil
paulo.cruvinel@embrapa.br

along with

ALLSENSORS 2018, The Third International Conference on Advances in Sensors, Actuators, Metering and Sensing

<http://www.aria.org/conferences2018/ALLSENSORS18.html>

Sensors play an important role in agriculture. Measurement systems comprise of sensors, transducers and signal processing devices. Today, a wide variety of such devices are available to be used; however, still there are challenges relating to sensors development and their applications. In other words, in many areas of interest, such subject is still open for research, development, and innovation.

In agriculture, for example, there are challenges to be solved, i.e., in relation of engineering systems and decision making, in which is still quite difficult to choose suitable sensors/transducers for applications related to water, soil, plant and atmosphere, and their integration to solve real problems related to food, fibers and energy production. In agriculture, the use of smart sensors would help to appropriately exploit all available resources and to apply in a rational manner the agricultural inputs and products, leading to food security with sustainability.

There are needs for sensors in such fields of knowledge which are related with the qualification of measurements of physical, chemical, and biological variables to support decision making processes, which are based today in the advanced concepts of the Industry 4.0, Big Data, Internet of Things, Deep Learning, Autonomous Machinery, Remote Sensing, and Advanced Signal Processing, among others.

AgrSensApps is proposed as a special track collecting recent advances in this field, including, but not limited to:

- Resistive Sensors (millimetric, micrometric and nanometric scale) and their application in agriculture;
- Capacitive Sensors (millimetric, micrometric and nanometric scale) and their application in agriculture;
- Magnetic sensors (millimetric, micrometric and nanometric scale) and their application in agriculture;
- Sensors and their use in unmanned aerial or ground vehicles (UAVs and UGVs) for agricultural applications;
- Sensors for autonomous machinery navigation in agricultural applications and environments;
- Sensors for sprayers and agricultural inputs (chemical, gas or biological products).
- Sensors for quality evaluation of agricultural products for insitu analysis;
- Sensors for post-production processes;
- Sensors for image analysis in agricultural processes (optical cameras, Light Detection and Ranging (LIDAR), radar and micro-waves devices, embedded image sensors);
- wireless sensors and networks' applications in agriculture;
- Non-statistical and Statistical digital signal processing from agricultural sensors and modeling.

Contribution Types

- Regular papers [in the proceedings, digital library]
- Short papers (work in progress) [in the proceedings, digital library]
- Posters: two pages [in the proceedings, digital library]
- Posters: slide only [slide-deck posted on www.iaia.org]
- Presentations: slide only [slide-deck posted on www.iaia.org]
- Demos: two pages [posted on www.iaia.org]

Important Datelines

- Inform the Chair: *As soon as you decided to contribute*
- Submission: December 7, 2017
- Notification: January 12, 2018
- Registration: January 26, 2018
- Camera ready: February 5, 2018

Note: These deadlines are somewhat flexible, providing arrangements are made ahead of time with the chair.

Paper Format

- See: <http://www.iaia.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaia.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iaiajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iaiasubmit.org/conferences/submit/newcontribution.php?event=ALLSENSORS+2018+Special>

Please select Track Preference as **AgrSensApps**

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaia.org/registration.html>

Contact

Chair: Paulo E. Cruvinel, paulo.cruvinel@embrapa.br

Logistics: steve@iaia.org