

Call for Contributions

Note: On site and Online Options

To accommodate many situations, we are offering the option of either physical presence or virtual participation. We would be delighted if all authors manage to attend in person but are aware that special circumstances are best handled by having flexible options.

Submission:

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

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=ALLSENSORS+2025+Special>

Please select Track Preference as **STSA**

Special track

STSA: Sensors, Actuators, and Metering for Agriculture and Knowledge in Engineering

Chair

Prof. Dr. Paulo E. Cruvinel
Brazilian Corporation for Agricultural Research (Embrapa),
Federal University of São Carlos (UFSCar) - Post Graduation Programme in Computer
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along with

ALLSENSORS 2025, The Tenth International Conference on Advances in Sensors, Actuators, Metering and Sensing

May 18 - 22, 2025 – Nice, French Riviera

<https://www.iaria.org/conferences2025/ALLSENSORS25.html>

The world is currently experiencing a transition from the fourth to the fifth wave (Industry 5.0), which is related to knowledge, sustainability, and innovation. In fact, it has been promoting a positive impact on society, despite also bringing great challenges. Such a context is also occurring for food, fiber, and energy production from agricultural processes.

Additionally, this new wave is anchored by advanced knowledge and technologies, human centrality, sustainability and resilience, thus understood as a bioeconomy that integrates ecology, industry and economy to generate high value-added products and services. In the core of such a movement one may find the evolution of sensors, actuators, and metering procedures, including the connection of the analogical world with the digital one. Likewise, in agriculture there are demands for sensors, which includes research, development, and customization for different applications. Nowadays sensors, actuators, and metering are becoming more reliable, accurate, controllable, as well as smart-customized, including opportunities to be affordable and compatible to Internet-of-Things (IoT) and Artificial Intelligence (AI) operability.

However, despite the advances that have already occurred, there still have a significant window of opportunities for research, development and innovation. Besides, for such developments, one may find unexplored solutions that can only be arrived upon collaborative research, adding expertise, and coming together in interdisciplinary approaches.

This special track is intended to bring together researchers, entrepreneurs, practitioners and domain experts, sharing solutions for problem solving by sensors, actuators, instrumentation, signal processing, computing and multi-criteria measurement, to address the challenges in engineering for food, fibers, and energy production.

In fact, it will provide a unique forum for discussion on integrated frameworks considering agricultural sensors, actuators, meters, business ontologies, IoT understanding, value-based process technologies, embedded architectures, machine learning, deep learning, AI-soft sensors based and all related systems.

This track welcomes work addressing the following application areas, but re not limited to

- Sensors, signal and image processing
- Actuators in control process
- Modeling, simulation, and emulation
- Interoperability
- Internet of things
- Big data analysis, architectures, and infrastructures
- Computational Intelligence applied to sensors and actuators data analysis
- AI-soft sensors-driven applications
- Fields of interest
 - Agricultural management systems
 - Agricultural business, and economy
 - Engineering and humanity
 - Sciences for agriculture
 - Silage and grain storage
 - Plant phenotyping and pest control
 - Rational use of agricultural inputs
 - Automation and decision making in agriculture

Important Datelines

Inform the Chair, as soon as you decide to contribute.

- Submission: March 29
- Notification: April 18
- Registration: April 30
- Camera-ready: April 30

***Note:** The submission deadline is somewhat flexible, providing arrangements are made ahead of time with the chair.*

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.iaria.org]
- Presentations: slide only [slide-deck posted on www.iaria.org]
- Demos: two pages [posted on www.iaria.org]

Paper Format

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

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.ariajournals.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>

Papers Submission

<https://www.ariasubmit.org/conferences/submit/newcontribution.php?event=ALLSENSORS+2025+Special>

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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.aria.org/registration.html>

Contacts

Chair

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