2022 IEEE SENSORS APPLICATIONS SYMPOSIUM

August 1-3, 2022 | SUNDSVALL, SWEDEN

SPECIAL SESSION CALL FOR PAPERS:
Sensing systems for a sustainable economy




ORGANIZERS

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IMPORTANT DATES

April 11, 2022
Initial Paper Submission due

May 23, 2022
First author notification

June 6, 2022
Revised paper deadline

June 13, 2022
Final decision

June 27, 2022
Final paper submission

The ubiquitous diffusion of sensing systems required to implement a more sustainable society poses new challenges to the sensors cycle of life. On the one hand, sensing systems will be necessary for infusing everyday life with electronic-based sensing capabilities. On the other hand, low-cost or even disposable sensing systems require new materials and technologies. At least three main aspects need to be considered when searching for more sustainable sensing systems. We need low-cost and environmentally-safe raw materials and production strategies that require low energy consumption and moderate release of pollutants into the environment. And finally, but not less important, resulting systems that can be recycled, or even better, biodegraded. As a further aspect, the environmental fingerprint of the envisaged hardware needs to be carefully investigated, and new metrics need to be defined.

The Special Session will be devoted to all aspects of the sensing system life, transducers, and novel measurement systems relevant to their environmental impact, from materials to production steps and after-life fate.

Submissions are welcome but not limited to the following topics:

Topics

- Materials for sensors and transducers
- Green electronics
- Sensors, transducers and sensing systems for a sustainable economy
- Novel methods for sensing
- Emerging technologies for sensors and sensing methods
- Low-cost and low-energy based production processes
- Green-chemistry for sensing system fabrication
- Additive or low-temperature production processes
- Ink-jet based transducers
- Polymer-based transducers
- Bio-polymer based transducers
- Low-power or non-battery based sensing systems
- Energy harvesting and converters
- Disposable and biodegradable transducers
- Models and simulations of novel sensing systems for a sustainable society
- Environmental fingerprint of electronics and sensing systems

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