



## Special Session

# Self-Powered sensing for IoT

## Topics of Interest

This Special Session aims to attract recent developments on self-powered sensing for the Internet of Things (IoT), showcasing works that focus on research studies aligned with the development of self-powered sensing node and their potential implementation in emerging applications.

Topics of interest include, but are not limited to:

1. **Sensor Design:** Micromachined (MEMS), quantum, and photonic sensor technologies.
2. **Energy Harvesting:** Piezoelectric, electromagnetic, triboelectric, and pyroelectric energy harvesting methods.
3. **Bio-inspired Sensors and Energy Harvesters:** Innovative designs inspired by biological systems.
4. **Self-Powered Systems with Machine Learning:** Integration of self-powered sensing nodes with machine learning algorithms for enhanced functionality.

Submissions covering a wide range of applications are encouraged, including but not limited to biomedical, manufacturing, mobility systems, environmental and asset monitoring.

## Organisers

Prof. Stephanos Theodossiades and Dr. Amal Hajjaj

*Loughborough University, UK*

## Important Dates & Information

Deadline extended digest

18 March 2025

(Please indicate the special session title in the paper header)

Notification of acceptance

25 April 2025

Deadline full paper

10 June 2025

Conference Website: <https://www.ecce-europe.org/2025/>

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