ENSsys 2023

in conjunction with ACM SenSys

November 12, 2023 — Turkiye, at Bahcesehir University, Istanbul

11th International Workshop on Energy Harvesting & Energy-Neutral Sensing Systems (ENSsys)

Call for Papers

Complementing the topics of ACM SenSys 2023, this workshop will bring researchers together to explore the challenges, issues, and opportunities in the research, design, and engineering of energy-harvesting, energy-neutral and intermittent sensing systems. These are enabling technologies for future applications in smart energy, transportation, environmental monitoring, and smart cities. Innovative solutions in hardware for energy scavenging, adaptive algorithms, and power management policies are needed to enable either uninterrupted or intermittent operation.
High-quality technical articles are solicited, describing advances in sensing systems powered by energy harvesting, as well as those which describe practical deployments and implementation experiences. ENSsys also offers a platform for innovative future directions by soliciting position papers.
Topics of interest include, but are not limited to, the following:

Important Dates

Submission:	September 8, 2023
Notification:	October 6, 2023
Camera Ready:	October 20, 2023
Workshop:	November 12, 2023

Organizing Committee

General Chair: Sebastian Bader; Mid Sweden University; Sweden
Bashima Islam; Worcester Polytechnic Institute; USA
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Sai Swaminath, University of Tennessee, USA
Mahmoud Wagih, University of Glasgow, UK
Matthias Wählisch, Freie Universität Berlin, Germany
Lars Wolf, TU Braunschweig, Germany
Matteo Zella, University Duisburg-Essen, Germany

Workshop Scope

Topics of interest include, but are not limited to:

- Power management concepts, algorithms, and circuits for energy-harvesting sensing systems
- Hardware and software concepts, algorithms, and circuits for intermittent computing
- Middleware and services supporting interoperability between zero-energy networks
- Resource management and operating system support for energy-harvesting sensing systems
- Network-wide distributed energy management (e.g., routing, adaptive duty cycling, etc.)
- Artificial intelligence for battery-free systems
- Communication in intermittent-power domain
- Online measurement of energy intake and consumption
- Predicting energy intake and consumption
- Ensuring reliable operation in energy-harvesting sensor systems
- Modelling, simulation, and tools for effective design of future energy harvesting sensing systems
- Architectures and standards for energy-neutral, power-neutral, or intermittent sensing systems
- Internet of (battery-less) Things
- Experience with real-world deployments and innovative applications

www.enssys.org

Submission Guidelines

We are soliciting four types of submission: **technical papers** (up to 6 pages, plus references), **position papers** (up to 3 pages), **poster papers** (up to 2 pages), and **demo papers** (up to 2 pages). Papers should be submitted for consideration via the workshop website prior to the submission deadline. Papers must adhere to the formatting guidelines (templates are available from the workshop website) and will undergo a double-blind review. They will be reviewed for novelty, relevance, and quality. Accepted submissions will be available on the ACM Digital Library at least one week before the conference.