

CALL FOR PAPERS - SPECIAL SESSION

"Innovative Approaches and Applications for Advancing Battery Technologies"

for CODIT 2025

July 15-18, 2025 • Split, Croatia

Session Co-Chairs:

Prof. Elisa Mostacciuolo, University of Sannio, Benevento, Italy (email: emostac@unisannio.it)
Prof. Silvio Baccari, University of Campania, Caserta, Italy (email: silvio.baccari@unicampania.it)
Session description:

This special session aims to explore cutting-edge advancements in battery technologies and their applications across a variety of fields, including electric and hybrid vehicles, renewable energy systems, consumer electronics, and aerospace applications. By addressing both innovative methodologies and practical implementation challenges, the session will focus on solutions to optimize battery performance, enhance reliability, and extend lifespan under real-world operating conditions.

When dealing with batteries, it is crucial to focus on parameters such as State of Charge and State of Health, ensuring thermal stability, and diagnosing faults. These efforts are further enhanced by the integration of advanced control strategies and data-driven methods.

The session will place particular emphasis on application-driven advancements, including the development of fast-charging methods for electric vehicles, efficient energy utilization in hybrid systems, and robust power management solutions for satellites in extreme environments. It will also explore challenges in integrating battery systems with renewable energy sources and grid infrastructure, offering insights into the future of energy storage and management.

The topics of interest for this session include, but are not limited to:

- Advanced Monitoring Techniques
- State-of-Charge and State-of-Health Management
- Charging and Discharging Optimization
- Thermal Regulation and Stability
- Integration with Renewable Energy Systems

SUBMISSION

Papers must be submitted electronically for peer review through PaperCept by February 07, 2025:

http://controls.papercept.net/conferences/scripts/start.pl. In PaperCept, click on the CoDIT 2025 link "Submit a Contribution to CoDIT 2025" and follow the steps.

IMPORTANT: All papers must be written in English and should describe original work. The length of the paper is limited to a maximum of 6 pages (in the standard IEEE conference double column format).

DEADLINES

February 07, 2025: deadline for paper submission April 27, 2025: notification of acceptance/reject May 17, 2025: deadline for final paper and registration