

IEEE International Conference on Industrial Electronics for Sustainable Energy Systems (IESSES 2023)

Special Session on “Advances in State of Health Estimation for Lithium-ion Battery Energy Storage Systems”

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Call for Papers

Theme: In recent years, the development of green and low-carbon technologies has become a global consensus. The realization of the energy revolution is inseparable from the support of the energy storage battery industry. The lithium-ion battery is essential to the smart grid, renewable energy development, energy Internet, distributed micro-grid, etc. The lithium-ion battery has widespread applications because of its excellent cycle characteristics, fast response speed, and high efficiency. Consequently, the state of health of the lithium-ion battery is crucial to the safety and reliability of lithium-ion energy storage systems. How to accurately estimate the state of health of the lithium-ion battery and decrease the adverse effects of failures on the whole system through active intervention has become a research hotspot. This Special Session provides a forum for researchers and industrial engineers to exchange their latest results in lithium-ion battery state-of-health estimation and discuss important issues, challenges, and possible future trends in lithium-ion battery energy storage systems. The papers to be accepted in this Special Session are expected to provide the latest developments in the state of health estimation, especially new theoretical results with practical applications.

Topics of interest include, but are not limited to:

1	Multi-sensory data analysis of battery management systems
2	Accurate battery state-of-charge estimation approaches
3	Model-based and data-driven battery state-of-health estimation approaches
4	Battery remaining useful life prediction and life extension approaches
5	Intelligent approaches of battery health monitoring, diagnosis, and decisions
6	AI-based applications in battery management systems

IES Technical Committee Sponsoring the Special Session:

TC: Data-Driven Control and Monitoring

Submissions Procedure:

All the instructions for paper submission are included in the conference website:

<https://www.ieee-ieses.org>

Deadlines:

Full paper submission:	Mar. 31, 2023
Paper acceptance notification:	Apr. 15, 2023
Camera-ready paper submission:	May 15, 2023