

34th IEEE International Symposium on Industrial Electronics (ISIE 2025)

Special Session on

“Advanced Control Techniques for Power Electronics Converters”

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Call for Papers

Theme:

The demand for high-quality electrical energy has increased considerably in recent years. Basically, the power converters can be used in wide range of applications which require electrical power conversion, conditioning, compensation, and active filtering through the use of well-designed control methods which should meet the desired objectives set for each application. These applications involve integration of renewable energy sources to the utility grid by means of appropriate converter topology, uninterruptible power supplies, and power quality improvement. This session is intended to provide an insight on the latest control methods of various power converters mentioned above.

Topics of interest include, but are not limited to:

1	Lyapunov-function based control methods of various power converters
2	Sliding mode control of various power converters
3	Finite control set model predictive control of various power converters
4	Continuous control set model predictive control of various power converters
5	Combination of Lyapunov-function based control and model predictive control methods
6	Combination of sliding mode control and model predictive control methods
7	Sensorless MPC for electrical machines
8	Cost function design and weighting factors tuning in MPC
9	Application to mega-watt range wind turbines
10	

Reviewers (Provide 10-20 names with email and affiliation address)

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Submission Procedure:

All the instructions for paper submission are included in the conference website: <https://ieee-isie-2025.org/>

Deadlines:

Full paper submission:	March 31, 2025
Paper acceptance notification:	April 15, 2025
Camera-ready paper submission:	May 14, 2025

Please send this completed document to:

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