



Annual International Symposium on Industrial Electronics (ISIE) 2023

Special Sessions on

“Advanced Control Technologies for Electrical Machines in Electrified Vehicles”

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Call for Papers

Theme:

The rapid development of electrified vehicles and the increasing demand for driving performance are accelerating the technological innovation of electrical machines and their drive systems. Various electrical machine types are being used for commercially electrified vehicles, such as permanent magnet synchronous machines, induction machines, electrically excited synchronous machines, and reluctance machines. Each of them brings numerous control problems and strategies that are valuable to study. Recent research on high-performance motor control technologies is working towards optimizing electric drive efficiency, improving vehicle transient and steady-state performance, and enhancing powertrain safety. Therefore, a timely special session is held in ISIE 2023 to discuss the recent progress in advanced control strategies for electrical machines in electrified vehicles.

Topics of interest include, but are not limited to:

1	Advanced speed/torque/current control
2	Fault diagnosis and tolerance control
3	Current/position/speed Sensorless Control
4	Offline and online parameter identification
5	State estimation of electrical machines
6	New voltage modulation schemes
7	Control technologies for new converter topologies in machine drives
8	Control technologies for new electrical machine structures
9	Machine learning and deep learning in electrical machine drives
10	Advanced control for electrical machine-related powertrain systems

Submissions Procedure:

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

<https://2023.ieee-isie.org/>

Deadlines:

Full paper submission: January 31, 2023

Paper acceptance notification: April 15, 2023

Camera-ready paper submission: April. 30, 2023