

Annual Conference of the IEEE Industrial Electronics Society (IECON 2021)

Special Session on

“High-Frequency Electric Drives for Transportation Electrification”

Organized by

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Call for Papers

Theme: High-frequency electric drives generally relies on high-speed electrical machines at the aim of reducing size, weight, and costs compared to low-frequency counterparts. High-frequency supply is also required by medium-speed electrical machines when relatively high numbers of poles are concerned. In this regard, the employment of wide-band-gap semiconductor devices seem unavoidable, as well as multilevel converter architectures, efficient and effective control systems and pulse width modulation techniques. This Special Session is thus focused on recent advancements and new trends on high-frequency electric drives, ranging from machine/converter architecture to control/modulation approaches, with particular reference to transportation electrification.

Topics of interest include, but are not limited to:

- High-speed electrical machines
- Multilevel converters
- Wide-band-gap converters
- PWM techniques for high-frequency converters
- Analysis method of high-frequency electric machines
- EMI/EMC in high-frequency electric drives
- Emerging applications of high-frequency electric drives
- Control strategies and techniques for high-frequency drives

Submissions Procedure: All the instructions for paper submission are included in the conference website: <https://attend.ieee.org/iecon-2021/>

Deadlines:

Full paper submission:	June 25, 2021
Paper acceptance notification:	July 30, 2021
Camera-ready paper submission:	Aug. 27, 2021

Sponsoring IES Technical Committees:

- Electrical Machines (<https://sites.google.com/view/ieee-ies-emtc/>)
- Transportation Electrification (<https://tcte.ieee-ies.org/>)