



Power Electronics in Automotive Industry Applications

Guest Editors:

Dr. Emad Samadaei

emad.samadaei@volvo.com

Prof. Dr. Edris Pouresmaeil

edris.pouresmaeil@aalto.fi

Prof. Dr. Kent Bertilsson

kent.bertilsson@miun.se

Dr. Hani Vahedi

hani.vahedi@ieee.org

Deadline for manuscript
submissions:

30 November 2021

Message from the Guest Editors

The main aim of this Special Issue is to seek high-quality submissions that highlight emerging applications, address recent breakthroughs of the Power Electronics technology in Automotive Industry and Electric Vehicle Applications - oriented design, high-power density power converters, robust and reliable power electronics technologies, smart control of power electronics at device, and system levels. The topics of interest include, but are not limited to:

- Power electronics application in electric vehicles, electrical drives, electrical charging system and rechargeable energy storage system
- Application of power electronics in smart DC and AC distribution systems
- High power density power electronic systems
- Electromagnetic compatibility (EMC)
- Common mode voltage/current
- Power Converter design (Inverter, Multilevel Inverter, DC-DC converter, Onboard charger, Integrated power converter, air compressor, lighting and etc.)
- Power Converter control
- Condition monitoring, prognostic and diagnostic of power electronics with enhanced control for reliable and robust applications

