# THE 20TH IEEE INTERNATIONAL CONFERENCE ON INDUSTRIAL TECHNOLOGY IEEE-ICIT 2019

**13 - 15 FEBRUARY 2019, MELBOURNE CONVENTION AND EXHIBITION CENTRE, MELBOURNE, AUSTRALIA**

## Special Session on

## "DC Power Electronic and Microgrid for Transportation Applications"

Organized by


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## Call for Papers

Outline of the Session

DC converter and microgird are important for electrical transportations for example electric vehicles. The topology and control algorithm of DC converter and microgird plays a significant role for the system reliability and efficiency. A well-designed power converter control algorithm could prevent energy sources such as battery and fuel cell degradation under abnormal operation conditions. The objective of this Special Session is to present the latest progresses and developments in design and control methods of power electronics and microgird to improve the lifespan and the robustness of the transportation system.

Topics of the Session include but are not limited to:

- Topologies design of power electronics and microgird to increase the system lifetime and reliability
- Advanced control techniques to improve system robustness
- Control strategies for maximizing lifetime of power generation systems
- Fault identification, isolation techniques, and stability analysis of power electronics
- Influence of power converter harmonics / frequencies on energy source degradation / aging



**Accepted papers will be published in an IEEE proceedings volume and will be also submitted for the International Publication in *IEEExplore***