

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

## Special Session on

### “Advances in Protection System: DC and AC Power Network”

#### Organized by

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## Call for Papers

### Theme:

The risk of electrical fault scenarios (shorts and overload) has been a primary hurdle in the growth of Direct Current (DC) networks. However, DC power brings a strong set of attributes for today's and tomorrow's grid and will play a crucial role in industrial application, transportation and offshore oil, wind power to name a few. Recent advances in the semiconductor technology and hardware associated for handling DC has opened the opportunities for innovation in DC breakers to address the lingering issues and improve the overall system efficiency. This special session will capture such innovations around not just the DC and AC breaker technology but also in fault selection and protection for different systems, fault sensing methodology, and design challenges of such breakers.

### Topics of interest include, but are not limited to:

- Low Voltage (LV) and Medium Voltage (MV) Breaker topology
- Power semiconductor switches development, characterization, evaluation for circuit breaker applications.
- Control scheme, coordination of circuit breakers
- Solid-State/ Hybrid Circuit Breaker- topologies, control, and design
- Circuit design and optimization including gate drivers, voltage clamping circuits, sensing and control circuits, etc.
- Fault Detection and Protection for AC/DC grid or system

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