

# Annual International Symposium on Industrial Electronics (ISIE) 2023

# **Special Sessions on**

# "Advanced Topologies and Control Techniques for Multilevel Converters"

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# **Call for Papers**

#### Theme:

Multilevel converters including DC/AC and AC/DC are nowadays used in various industrial, commercial, and domestic applications such as grid-connected systems, rectifiers, active power filter, UPS, electrical drives, etc. This converter makes use of abundant number of power semiconductor devices that should be properly controlled to have maximum efficiency. The primary challenge is to find appropriate topology, design the suitable PWM switching techniques, and apply the appropriate controller. Moreover, since the multilevel converters have nonlinear character, closed-loop based system using advanced controllers such as sliding mode, model predictive, adaptive, intelligent methods to meet the targeted application. Therefore, this special session concentrates on the latest development of multilevel converters topologies, control and device switching techniques but not limited to.

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

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1	PWM modulation technique for multilevel inverters
2	Innovative and intelligent closed loop control strategies
3	Novel current based control design for renewable energy generation using grid-
	connected converters
4	Recent development techniques for common mode voltage control and drives
	application
5	Machine learning and deep learning techniques for Power Electronics application
6	Industrial applications in the area of power quality, electrification and transportation,
	UPS, etc.

# **Submissions Procedure:**

All the instructions for paper submission are included in the conference website: <a href="https://2023.ieee-isie.org/">https://2023.ieee-isie.org/</a>

### **Deadlines:**

Full paper submission: January 31, 2023

Paper acceptance notification: April 15, 2023

Camera-ready paper submission: April. 30, 2023







