

Annual International Symposium on Industrial Electronics (ISIE) 2023

Special Sessions on

"Modelling, Simulation, Protection and Control of Smart Grids"

Principle Organizer: First Name: Omar H. Email: <u>ohabdalla@ieee.org</u> Affiliations: Helwan University, Egypt

Co-Organizer 1: First Name: Amr Amin Email: <u>Amr.Metwallt@gcu.edu</u> Affiliations: Grand Canyon University, USA

Co-Organizer 2: First Name: Hady H. Email: <u>hadyhabib@hotmail.com</u> Affiliations: Heliopolis University, Egypt Last Name: Abdalla

Last Name: Metwally

Last Name: Fayek

Co-Organizer 3:First Name: PanosLast Name: KotsampopoulosEmail: kotsa@power.ece.ntua.grAffiliations: National Technical University of Athens, Greece.

Co-Organizer 4:First Name: FarhadLast Name: ShahniaEmail: F.Shahnia@murdoch.edu.auAffiliations: Murdoch University, Australia.









Call for Papers

Theme:

The smart grid may be defined as a power system with high quality, security, stability, efficiency and green environment. To achieve these objectives the following points would be considered in future grids: wide area measurement system (WAMS), real-time control and protection, self-healing property, high penetration level of renewable power generation, optimal operation in terms of technical, environmental, social and economic aspects, etc. Cyber security is one of the most important subjects in developing smart grids.

This Research Topic of this special session focuses on novel methods in modelling and simulation of smart grids including all its parts in terms of distributed generation, ICT, storage technologies, Hardware in Loop (HIL), etc. The Research Topic also discusses modern methods to control and protect smart grids targeting high reliability and security. Applications of smart grid techniques to real systems are welcome.

Topics of interest include, but are not limited to:

1	Modelling and simulation of smart grids, microgrids and nanogrids
2	Real-time simulation, control, and protection of modern power systems
3	Self-healing in smart grids
4	Modern control techniques of power systems and microgrids
5	Modern protection techniques of smart grids
6	Advances in HIL testing of smart grid/microgrid controllers
7	Energy storage and energy management systems in smart grids
8	Cyber security
9	Wide area control and control techniques in smart grids
10	IoT applications in smart grids

Submissions Procedure:

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

Deadlines:

Full paper submission:	January 31, 2023
Paper acceptance notification:	April 15, 2023
Camera-ready paper submission:	April. 30, 2023







