

JOINT E-CONFERENCE ON RENEWABLE ENERGY AND SUSTAINABILITY & GEO SCIENCE AND GREEN TECHNOLOGY MARCH 15-16, 2023 | WEBINAR



Prof. Mohamed Mosaad

Developing and Application of Optimization Techniques in Modern Power Systems Operation, Optimization and Control of Renewable Energy Generation Systems

Nowadays, the solution of complex problems related to modern power systems based on optimization techniques is continuously increasing. Moreover, developing effective optimization algorithms and its application in solving power systems problems is still a hot research topic. This Special Issue will deal with developing and applying optimization techniques for solving different power systems problems.

Topics that will be covered in this presentation:

- Optimal allocation of FACTS devices in power systems.
- Modern optimization techniques for improving the integration of renewable energy sources into the grid
- Application of optimization techniques in microgrids
- Energy storage systems installed in smart grids, supporting their optimal operation.

Keywords: Optimization, Metaheuristics, Power systems, Single and multi-objective, Renewable energy, FACTS
Optimal power flow, Microgrids, Smart grids, Energy storage

Biography:

Mohamed I. Mossad, SMIEEE received his BSc and MSc degrees from Zagazig University, Egypt, and the PhD degree from Cairo University, Egypt, all in electrical engineering. Currently he is an associate professor in the Department of Electrical and Electronic Engineering Technology, YIC, KSA, author of more than 100 high-ranked journal and conference papers. His research interests include power system stability, control, optimization and renewable energy. He is the editor-in chief for YJES. He is a reviewer for the IEEE transaction on power delivery, IEEE transaction on energy conversion, IET electric power application journal, IET generation transmission & distribution journal, IET journal of engineering, IET system integration, Journal of cleaner production, Electric power system components, International Journal of Industrial Electronics and Drives (IJIED), IEEE access journal, Electric power system research, energies, Alexandria journal of Engineering, Ain Shams journal of Engineering, Asian journal of control, and International Journal of Energy Engineering (IJEE). He achieved a great success by being included in the "World's Most Influential Scientists" 2% list, which was created USA Stanford University considering the "Works of the Year 2020, 2021".