



**12th International Conference on
Compatibility, Power Electronics and
Power Engineering
CPE-POWERENG 2018
10-12 April, 2018, Doha, Qatar**



**Special Session on
Artificial Intelligence Applications on Power Electronics Systems and Smart Microgrids
organized and co-chaired by:**

Marco Rivera marcoriv@utalca.cl
Yamisleydi Salgueiro yamisalgueiro@gmail.com
Rafael Bello Pérez rbellop@uclv.edu.cu

Call for Papers

Outline of the Session:

Artificial Intelligence (AI) is a key technology in systems modeling, control, fault analysis and operation scheduling of power and energy systems. These techniques comprise areas like artificial neural networks, genetic algorithms, particle swarm optimizations, fuzzy logic, machine learning, game theory, multi-agent systems and hybrid systems. This special session seeks to provide a discussion forum and as well as aiming to close the gaps between computer scientists and power electronics engineers, about recent AI application on Power Electronics and Smart Microgrids.

Topics of interest include, but are not limited to:

- Energy efficiency and optimization in smart microgrids.
- Control techniques efficiency and optimization.
- Fault detection and diagnosis.
- Power quality disturbance detection and analysis.
- Techniques to improve robustness against system failure.
- Appliance load monitoring applications.
- Renewable energy sources prediction problems.
- Big Data and Data Science on energy analysis and decision making.
- Any application to power electronics systems.
- Any application to renewable energy problems.
- Any application to electrical vehicles.
- Any application to smart microgrids.

Author's schedule:

Deadline for submission of special session papers November 15, 2017
Notification of acceptance January, 2018
Deadline for submission of final manuscripts February, 2018

All the instructions for paper submission are included in the conference website:

<http://www.cpe-powereng2018.org/>