

IEEE REPS-GIE 2018

Smart Systems and Power Electronics for Renewable Energy Technology

Pr. Abbas Dandache, Lorraine University, France

Pr. Ali Ahaitouf, LERSI, FST-USMBA, Morocco

Renewable energy is derived from non-conventional energy, which is continuously replenished by natural process. It's based on supplement generation and storage which improves grid reliability and security. Renewable Energy Systems are seen as important areas of future smart solution ranging residential systems and industrial systems. Different forms of renewable energy systems includes electronics devices, circuits and smart applications with different sources: Solar, Wind, Hydro, Geothermal, Wave and Tidal.

This special session aims to present important results to the international community of Renewable Energy Systems and Power Electronics in the form research, development, applications and technology. Topics of interest include, but not limited to:

- New trends and technologies for Renewable Energy Systems
- Energy injection from renewable energy system to grid
- Power devices and driving circuits
- Control techniques
- Energy efficiency
- Renewable energy research and applications for industries
- RESs for electrical vehicles and components
- Machine learning studies for RE systems and applications
- Reliability and maintenance in RESs
- Renewable energy in smart cities

