

## **Special Session on**

# Supervision, Condition Monitoring and Diagnostic of Renewable Energetic Systems

#### **Special Session organizers:**

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#### Theme:

The hybrid renewable energy systems (HRES) allow local resource optimization where the arrangement depends on available resources and final users' needs. However, the reliability and durability of hybrid renewable energy systems are still two main hot topics and they can be considered as complex systems due to the cohabitation AC and DC systems with continuous and discrete dynamics.

The purpose of this special session is to reveal some of the recent developments, both theoretically and practically, including the supervision, the condition monitoring and faults diagnostic method of renewable energy complex systems.

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

This special session is therefore intended to focus on state-of-the-art of methods and applications, as well as future trends in (but not limited to) the following topics of interest in an overall perspective of supervision, condition monitoring and diagnostic of complex systems:

### **Topics**:

- Smart Grid Condition monitoring
- Future Factory Condition Monitoring
- Renewable Energy Systems Diagnostic
- Diagnostic of Production Systems
- Fault Detection in Energy Systems
- AI Application for Diagnostic and Condition Monitoring
- Fault diagnosis approach
- Prognostic
- Fault tolerant control strategies
- Remote monitoring and remote sensing