

Scientific Workshop

Micro and Smart Grid

**October 6th
2017**

Cité Descartes

Bâtiment Bienvenue
14-20 Bd Isaac Newton
77420 Champs-sur-Marne

Conference
Workshop
Poster Session

**Invited
Speakers**

- **Joseph M. GUERRERO**
- **Nikolaos HATZIARGYRIOU**
- **Romeo ORTEGA**
- **Carlos BORDONS**

Mandatory free registration before September 22th, to website
<https://www.eventbrite.fr/e/billets-jsn-micro-reseaux-2017-33620781663>



To the purpose to adress the technical constraints of interfacing renewable sources with the public electricity network, AC or DC micro-smart grid composed of a multi-source system an related controller/supervisor represent an integrated solution. Whether they are integrated into the distribution system or the transmission network, which can be AC or DC, HV or LV, high power or small power, the micro-smart grid or the componing clusters require a hierarchical approach. It will be composed by a systemic approach studying the interactions among the subsystems, with to each operation mode adapted control laws, and a specific approach related to the intermittent aspects of the system.

The Scientific Workshop on micro-smart grid is organized by the GT Microgrids (GDR SEEDS) and the GT RSEI (GDR MACS) in collaboration with the ITE Efficacity. The event will take place in Marne-la-Vallée on October 6th and will allow researchers, PhD students and industrial partners to present their work and to exchange on the micro-smart grid' theme. This will aim to introduce both theoretical and pratical micro-smart grid developments, offering information on their control and the possible industrial applications. Possible interesting subjects and related applications are :

- Modeling, control and management of micro-smart grid;
- Control for AC and DC micro-smart grid;
- Energy and power quality for micro-smart grid;
- Renewable energy integration and multi-energy systems;
- Static converters for micro-smart grid (topologies, efficiency, performance, etc.);
- Energy storage systems for micro-smart grid;
- Energy management for micro-smart grid (optimal planning, load shedding, real-time optimization, uncertainties evaluation, etc.);
- Test-beds, case-studies and pilot projects.

Invited Speakers

Josep M. Guerrero, Professor

• Aalborg University,
Faculty of Engineering
and Science,
Department of Energy
Technology
• Director of Microgrids
Laboratory
(<http://www.et.aau.dk/research-programmes/microgrids/>)

Nikolaos Hatziaargyriou, Professor

• National Technical
University of Athens,
School of Electrical and
Computer Engineering
• Director of SmartRUE
Laboratory
(<http://www.smartrue.gr/>)

Romeo Ortega, Professor

• Laboratoire des
Signaux et Systèmes,
Centrale Supélec,
Paris-Saclay University
• Research Director,
L2S Laboratory
(<http://www.l2s.centralesupelec.fr/en>)

Carlos Bordons, Professor

• Professor, University
of Sevilla, Spain
• Member of the
European Union
Control Association
Council

Important dates

- Mandatory free registration before **September 22th, 2017** to website <https://www.eventbrite.fr/e/billets-jsn-micro-reseaux-2017-33620781663>
- Scientific Workshop on Micro and Smart Grid : **October 6th, 2017 (8h – 18h)**