



IEEE Vehicle Power and Propulsion Conference
October 27-30, 2014, Coimbra, Portugal

<http://www.vppc2014.org/>

Special Session on

**THE ROLE OF INFORMATION AND COMMUNICATIONS TECHNOLOGIES ON THE
INTEGRATION OF ELECTRIC VEHICLES INTO THE SMART GRID**

Chairman: Dr Gregorio López, Universidad Carlos III de Madrid (Spain)

gregorio.lopez@uc3m.es

Co-chair: Dr Pedro Moura, University of Coimbra (Portugal)

pmoura@uc.pt

Co-chair: Dr José Ignacio Moreno, Universidad Carlos III de Madrid (Spain)

joseignacio.moreno@uc3m.es

Call for Papers

The great concern about global warming, climate change, and fossil fuel dependency, is driving the development and use of EVs (Electric Vehicles). However, the wide adoption of such EVs represents important challenges mainly to the power distribution infrastructures. At the same time, they can also be an important tool to the grid management with the possible control of the charging cycles and the use of the battery as a local energy storage device. New load control approaches are required in order to intelligently accommodate the demand of EVs with other new challenges and resources of the Smart Grids, such as distributed and local renewable generation, keeping the required investments as low as possible.

ICT (Information and Communications Technologies) represents a key enabler for the proper integration of EVs into the Smart Grid, since they will allow not only the required bidirectional massive exchange of information but also managing, processing and making decisions based on such huge amount of information in almost real time.

This Special Session aims to bring all the players (utilities, car manufacturers, charging spot manufacturers, charging network operators, telecom operators, system integrators, service providers, academia and R&D centres, standardization organizations, and regulators) together to provide a comprehensive overview of the issue, covering the main challenges and solutions along with current status and developments worldwide.

Topics of interest include, but are not limited to:

- Machine-to-Machine communications
- Communications architectures, technologies and protocols
- ICT standards
- Data models, applications, and services
- Big data
- Vehicle-to-Grid communications and Demand Response
- Authorization, Authentication, Accounting, and Charging
- E-mobility and Roaming
- Security and Privacy
- Integration of charging station networks
- Simulation and co-simulation
- Test-Beds and Field Trials

- Deadlines -

Submission of abstracts: April 17, 2014

Notice of acceptance: May 18, 2014

Submission of full papers: July 1st, 2014

Deadline for registration: August 31, 2014

All the instructions for abstracts are included in the conference website <http://www.vppc2014.org/>:

- Special Session title, paper title, authors, affiliation(s), mailing and e-mail address(es),
 - corresponding author clearly identified,
- Abstract of 100-300 words and a digest of 3-5 pages.