

CALL FOR PAPERS

Special Session on Smart and Universal Grids

to be held in the frame of
IECON 2013 - The 39th Annual Conference of the IEEE Industrial Electronics Society
10th - 13th of November 2013, Austria Center, Vienna, Austria



TOPIC OF THE SPECIAL SESSION

Limitations in fossil energy sources and progressing climatic change direct the research focus on innovative and sustainable technologies for energy systems. Especially addressed are the main distribution grids for gas, hydrogen, heat and electricity. Volatile power generation of renewable energies, like solar power or wind energy, challenges the stability of the power grid in the near future, mainly because of lack of storage capacity. At this point, parallel energy infrastructures can be taken into account: For example, the gas storage capacity of Austria equals nearly the annual consumption. Also hydrogen or heat can be stored more easily than electricity. With a universal grid, featuring intelligent interconnections between the different supply systems and increased efficiency in converting one energy carrier to another, like synthetic hydrocarbon fuel or steam reforming, the lack of storage capacity can be overcome. On the other hand, an intelligent infrastructure within smart grids can coordinate the electric loads and as a result of that, reduce the power consumption during load peaks and fill storage capacity in times of high generation using renewables. Both smart and universal grids make it possible to deal with the challenges of the future power distribution. This special session intends to show on-going and future research in the fields of demand response across different energy systems, interaction with electric vehicles,

SPECIAL SESSION ORGANISATION

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The organizers look forward to welcoming you to Vienna, Austria from 10th to 13th November 2013.

Important Dates

Regular Paper submission:	April 01, 2013
Notification of acceptance:	June 15, 2013
Final submission:	August 01, 2013



integration of buildings, communication infrastructure and interconnection for smart and universal distribution grids.

Topics include, but not restricted to:

- Load shedding and demand response
- Micro-grids for rural areas and buildings
- Development and integration of intelligent loads
- Sustainable energy systems with integration of renewable energies
- Integration of electric vehicles in the energy system
- Consumer interaction and awareness
- Improve energy efficiency in sustainable energy systems
- Interconnection between distribution grids

SUBMISSION OF PAPERS

The working language of the conference is English. Submit the full paper as PDF following the IEEE layout requirements by using the templates given at the conference web page. Accepted and presented papers will be published in an IEEE Proceedings volume and will be sent to IEEE Xplore. In addition, selected authors are encouraged to submit their papers for publication in the IEEE Transactions on Industrial Electronics or in the IEEE Transactions on Industrial Informatics.

THE CONFERENCE

IECON 2013 is the 39th Annual Conference of the IEEE Industrial Electronics Society, focusing on industrial and manufacturing theory and applications of electronics, controls, communications, instrumentation and computational intelligence. The objectives of the conference are to provide high quality research and professional interactions for the advancement of science, technology, and fellowship.

Papers with new research results are encouraged for submission. IECON 2013

will be held concurrently with the 7th IEEE International Conference on E-Learning in Industrial Electronics (ICE-LIE 2013). Participation in any of these events just requires a single conference registration fee. The world's industry, research, and academia are cordially invited to participate in the wealth of presentations, tutorials, special sessions and social activities, and furthermore, enjoy beautiful Vienna.