

CALL FOR PAPERS

Special Session on Photovoltaic Energy Conversion Systems

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

Grid-connected photovoltaic (PV) energy is the fastest growing renewable energy source of the last 5 years. In fact, current installed cumulative capacity has grown an average of 75% from 2 GW to 70GW, and is equivalent to 25% of wind power capacity. Today PV plants are well into the megawatt range, and can be found operating up to 290MW (Agua Caliente Solar Project, Yuma, USA), while several more even in the GW range are under planning and construction. Among the reasons are technology development and cost reduction of related technologies. Power electronics and industrial electronics play a key role as enabling technologies in this application field, and as such they are experiencing an important development in the last years. However, despite the maturity of small and medium rooftop PV systems and the solid growth of large-scale PV plants, several challenges and opportunities remain to be addressed. The higher PV penetration brings along new requirements on power quality, efficiency and grid code compliance. New converter topologies enable new PV system configurations with additional advantages, but with control and modulation challenges. The aim of this special session is to concentrate all related contributions submitted

SPECIAL SESSION ORGANISATION

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Important Dates

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

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



to IECON 2012, and to provide a fertile environment for presentation and discussion of emerging technology, while promoting academic and industrial interaction and cooperation. The scope of this special section includes, but is not limited to:

- Power converter topologies and system configurations for grid-connected PV systems
- Maximum power point tracking methods (local and global)
- Grid code compliance
- Efficiency, reliability and power quality of PV systems
- Control and modulation of PV converters
- Higher PV capacity penetration, distributed generation, energy storage, grid interconnection
- Technical issues of PV systems (leakage current, anti-islanding detection, fault tolerant operation)

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.