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## Proposal for IECON 2012 Special Session

Special Session on:

**“Towards a more Efficient Lighting”**

***Special Session Organizers (names and contact emails):***

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***Technical Outline of the Session and Topics:***

The public's awareness for the climate change is growing day after day. Thus, many efforts are being carried out to decrease energy consumption and to avoid greenhouse gas emissions. In lighting systems this awareness is being materialized by the phasing-out of inefficient incandescent lamps developed by many countries in the recent years. Hence, incandescent lamps are being replaced by more efficient lighting sources like fluorescent lamps, other discharge lamps or, more recently, solid state lamps; nicely, all of them requiring some kind of electronic converter to be properly supplied. In this scenario, the search for efficient power converters and techniques to supply and control the lighting devices results essential and makes a point of this special session.

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

- Electronic Ballasts for Fluorescent, HID and Electrodeless Lamps
- Power Converters for High-Brightness LED and Plasma Display Panels
- Electronic Ballasts for Xenon Lamps in Automotive Applications
- Power Factor Correction in Electronic Ballasts and Lighting Systems
- Dimming in Electronic Ballasts and Lighting Systems
- Control and Protection of Electronic Ballasts and Lighting Fixtures
- EMI/EMC Issues in Electronic Ballasts and Lighting Systems
- Modeling of Lighting Loads and Electronic ballasts
- Digital Control Applied to Electronic Ballasts and Lighting Fixtures
- Distributed Control Applied to Lighting Systems
- Energy-saving and Environmental-friendly Issues in Lighting Fixtures
- Future Trend of Industrial Electronics in Lighting Applications