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Special Session Call for Papers
International Symposium on Computer, Consumer and
Control, 2014

Special Session organizer: Prof. Ching-Ming Lai
Prof. Ming-Ji Yang

Session name: *Switching-Mode Power Supply*

Introduction/ Call for papers

A switching-mode power supply (SMPS) is an electronic power supply that incorporates a switching regulator to convert electrical power efficiently. An SMPS transfers power from a source, like mains power, to a load, such as a personal computer, while converting voltage and current characteristics.

SMPS are used as replacements for linear regulators when higher efficiency, smaller size or lighter weights are required. They are, however, more complicated; their switching currents can cause electrical noise problems if not carefully suppressed, and simple designs may have a poor power factor.

To promote the developments of switching-mode power supply, this session would focus on the circuit topologies, regulation and control techniques, soft-switching, power factor correction techniques, EMI/EMI Issues, power management IC and their various applications especially for external power supply (AC adapter) and battery charger. Prospective authors are invited to submit original papers to the Special Session

Indicative Topics/Areas

The topics of interest include, but are not limited to

- Topologies of Switching-Mode Power Supply
- Regulation and Control of Switching-Mode Power Supply
- Soft-Switching Technologies
- Power Factor Correction

- EMI/EMC Issues
- Power Management Integrated Circuits
- External Power Supply or Off-line AC Adapter
- Battery Charger

Prospective contributors are invited to submit their paper to Prof. Lai by email pecmlai@gmail.com. All presented papers will be published in the Proceedings and the excellent papers will be recommended for publication in the special issue of SCI Journal.