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

**Special Session organizer:** Prof. Cheng-I Chen  
Prof. Yeong-Chin Chen

**Session name:** *Power and Energy Technology*

**Introduction/ Call for papers**

With the ideas of energy saving and protection of power system, many smart technologies have been proposed in the field of power and energy. Recently, the concept of smart grid and microgrid have been proposed to meet these new requirements through integrated communications, advanced components, advanced control methods, sensing and measurement, and improved interfaces and decision support. Since the technology of advanced metering infrastructure is the fundamental early step to grid modernization, the accurate and efficient monitoring of power quality and system states becomes a crucial task. The wide-area measurement is then the conceptual extension of remote monitoring through the numerous integrated communication technologies.

Power quality at the grid interface is one of important parts in power purchase contracts between utilities and distributed generations. With the widespread use of rectifier/inverter for power conversion and related power electronic devices for operation control, many power-quality problems are present. Since the modern

equipments are sensitive to these power-quality disturbances, power utilities and their consumers start to pay much attention to the improvement of power quality in recent years.

To promote the developments of power and energy technologies, this session would focus on the smart grid, microgrid, renewable energy, power electronics and control techniques, modernization of power system, and their various applications. 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

- Smart Grid
- Microgrid
- Advanced Metering Infrastructure and Smart Building Energy Management
- Power Electronics and Control Methodologies
- Power System, Power Quality, and Related Issues
- Renewable Energy Technologies

Prospective contributors are invited to submit their paper to Prof. Chen by email [cichen@ee.ncu.edu.tw](mailto:cichen@ee.ncu.edu.tw). 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.