Special Session on
Predictive Control Techniques for Power Electronics Interfaces
organized and co-chaired by:

Dr. Behrooz Mirafzal  
mirafzal@ksu.edu
Dr. Mohammad Shadmand  
mshadmand@ksu.edu
Dr. Yushan Liu  
yushan_liu@yeah.net

Call for Papers

Outline of the Session:

Powerful microprocessors have recently fueled considerable interest in the application of predictive based control techniques for power electronics interfaces. The technique has numerous advantages over classical control methods including the inclusion of non-linear behavior, operational constraints, and multi-objective cost functions. The aim of this special session is to attract all researchers in this field to a fruitful interchange of experiences and recent research outcomes of predictive control methods for power electronics interfaces. Topics of interest include, but are not limited to:

- Model predictive control of smart microgrid systems
- Predictive control of grid-interaction inverters
- Predictive control of boost inverters
- Stability analysis of model predictive control for power converters
- Predictive control of inverters with seamless transition between islanded and grid-connected operations
- Sensor-less model predictive control
- Mode predictive control cost function weight factors design strategies
- Predictive control of impedance source converters
- Predictive control for high-power applications
- Predictive control for photovoltaic energy harvesting systems
- Computational efficient predictive control strategies
- Modulated model predictive control
- Predictive control of STATCOMS and shunt active power filters

Author’s schedule:

Deadline for submission of special session papers  
November 15, 2017
Notification of acceptance  
January, 2018
Deadline for submission of final manuscripts  
February, 2018

All the instructions for paper submission are included in the conference website: http://www.cpe-powereng2018.org/