



**7th Annual International Power Electronics, Drive systems,  
and Technologies Conference**  
16-18, February, 2016 – Tehran, Iran

**Special Session on  
“Predictive Control for Power Converters and Drives”**

**organized by**

Marco Rivera, Universidad de Talca, Chile, Email: marcoriv@utalca.cl

Jose Rodriguez, Universidad Andrés Bello, Chile, Email: jose.rodriguez@unab.cl

S.Alireza Davari, Shahid Rajaee Teacher Training University, Iran, Email: davari@srttu.edu

Patrick Wheeler, The University of Nottingham, UK, Email: Pat.Wheeler@nottingham.ac.uk

Predictive control is a very powerful and attractive alternative to control power electronics converters and drives due to the advances in modern microprocessors. The use of predictive control offers a number of advantages: very intuitive approach, no need of linear controllers and modulators, easy inclusion of nonlinearities and restrictions, etc. Interest on this topic in the last years has been recognized by the IEEE Transactions on Industrial Electronics in publication of a special section dedicated to Predictive Control of Power Electronics and Drives, that was published in December 2008 and June 2009. The Industrial Electronics Magazine also dedicate a special number to predictive control for power converters in January 2014. Besides, this topic has promote the organization of several special sessions in international conferences like ICIT,09, IECON'10, ISIE'12, IECON'12 and IECON'13. The aim of this special session is to attract all researchers in this field to a fruitful interchange of experiences. Topics of interest include, but are not limited to:

Topics of interest include:

- Current control of three-phase inverters using predictive control
- Current control for shunt active power filters using predictive control
- Current control of AC/DC or AC/DC/AC converters using predictive control
- Current control of three-phase source rectifiers using predictive control
- Predictive modulation in multi-switching systems
- Model predictive control in industrial electronics.
- Efficient predictive control strategies
- Predictive control for multilevel power converters
- New applications of predictive control for power converters
- Predictive control for high-power applications
- Predictive control for drives applications

**Important deadlines:**

Papers' submission : 30 October, 2015

**Contact** : pedstc2016@iust.ac.ir