

# CALL FOR PAPERS



## Special Session on **Wireless Power Transfer**

IECON 2018 - The 44<sup>th</sup> Annual Conference of the IEEE Industrial Electronics Society  
October 21-23, 2018, Washington D.C, USA



### TOPIC OF THE SPECIAL SESSION

As one of the most epoch-making techniques, wireless power transfer (WPT) unfolds increasing charm for various industrial applications, especially for the electric-driven devices. By utilizing this emerging technique, the energy receptor can harness wireless power from electromagnetic field in air and then charge their battery in dynamic states or extreme operation conditions. Thus, the WPT shows significant meanings for charging portable electronic devices, implanted medical devices, integrated circuits and solar-powered satellites etc. This session aims to offer a timely opportunity for academic researchers and industrial engineers to present, discuss, and exchange the latest results and findings of wireless power transfer technologies on the working principle, electromagnetic field theory, power electronic technique and applications, as well as the future development directions.

### Topics of the Session

- Wireless charging systems for mobile devices (smart phones, tablet PC, etc.) and smart home appliances;
- Contactless charging for electric vehicles;
- Wireless charging for biomedical application;
- Power electronics for WPT;
- Analytical methods for WPT technologies;
- Components and EMC designs;
- Electromagnetic safety research on WPT;
- Modelling, simulation, and control of wireless power systems;
- Foreign-objective detection for contactless charging;
- Energy security for wireless charging systems;
- Crossing research topics with WPT technologies, such as the motor drive; etc.;
- Emerging applications with wireless power transfer, such as the robotics, UAVs, etc.;
- Reviewing pervious researches and technique survey.

### ORGANIZED AND CO-CHAIRD BY

#### ➤ **Chunhua Liu**

City University of Hong Kong

[chualiu@eee.hku.hk](mailto:chualiu@eee.hku.hk)

[http://www.cityu.edu.hk/see/personal/Chunhua\\_LIU.htm](http://www.cityu.edu.hk/see/personal/Chunhua_LIU.htm)

#### ➤ **Zhen Zhang**

Tianjin University, China

[zhangz@tju.edu.cn](mailto:zhangz@tju.edu.cn)

<http://www.eee.hku.hk/~zhangz>

### Author's schedule:

- Deadline for submission of special session papers  
May 1, 2018
- Notification of acceptance  
July 15, 2018
- Deadline for submission of final manuscripts  
August 1, 2018