



DIPARTIMENTO DI INGEGNERIA DELL'ENERGIA ELETTRICA  
E DELL'INFORMAZIONE "GUGLIELMO MARCONI"

# IEEE DISTINGUISHED MICROWAVE LECTURE: CURRENT RESEARCH AND DEVELOPMENT OF WIRELESS POWER TRANSFER VIA RADIO WAVES AND THE APPLICATION

**Prof. Naoki Shinohara, Kyoto University, Japan**

**January 24, 2018, h. 15:30 - 17:30**

**Aula Magna della Scuola d'Ingegneria e Architettura,  
Università di Bologna, Il piano Via Risorgimento 2, Bologna.**

Theory, technologies, applications, and current R&D status of the wireless power transfer (WPT) will be presented. The talk will cover both the far-field WPT via radio waves, especially beam-type and ubiquitous-type WPT, and energy harvesting from broadcasting waves. The research of the WPT was started from the far-field WPT via radio waves, in particular the microwaves in 1960s. In recent years this became a hot topic again due to the rapid growth of wireless devices. Theory and technologies of antenna and circuits will be presented in case of beam-type and ubiquitous-type WPT. The industrial applications and current R&D status of the WPT via radio waves will be also presented.



**Naoki Shinohara** has been a professor in Research Institute for Sustainable Humanosphere, Kyoto University since 2010. He has been engaged in research on Solar Power Station/Satellite and Microwave Power Transmission system. He is IEEE Wireless Power Transfer Conference advisory committee member, URSI Commission D vice chair, technical committee on IEICE Wireless Power Transfer, communications society member, Japan Society of Electromagnetic Wave Energy Applications vice president, Space Solar Power Systems Society board member, Wireless Power Transfer Consortium for Practical Applications (WiPoT) chair, and Wireless Power Management Consortium (WPMc) chair.

## **Organizer**

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