

Current Research and Development of Wireless Power Transfer via Radio Waves and the Application



時間：5月11日(四) 1:40pm-3:00pm

地點：博理館201

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Abstract:

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.

Biography:

Naoki Shinohara received the B.E. degree in electronic engineering, the M.E. and Ph.D (Eng.) degrees in electrical engineering from Kyoto University, Japan, in 1991, 1993 and 1996, respectively. He was a research associate in the Radio Atmospheric Science Center, Kyoto University from 1996. From 2010, he has been a professor in Research Institute for Sustainable Humanosphere, Kyoto University. He has been engaged in research on Solar Power Station/Satellite and Microwave Power Transmission system. He is IEEE Distinguished Microwave Lecturer, IEEE MTT-S Technical Committee 26 (Wireless Power Transfer and Conversion) vice chair, IEEE MTT-S Kansai Chapter TPC member, IEEE Wireless Power Transfer Conference advisory committee member, international journal of Wireless Power Transfer (Cambridge Press) executive editor, Radio Science for URSI Japanese committee C member, , past technical committee chair on IEICE Wireless Power Transfer, Japan Society of Electromagnetic Wave Energy Applications vice chair, Wireless Power Transfer Consortium for Practical Applications (WiPoT) chair, and Wireless Power Management Consortium (WPMc) chair.

主辦單位：臺灣電磁產學聯盟、IEEE MTT-S Taipei Chapter

協辦單位：臺大電信所、臺大電信研究中心