



# EMC Distinguished Lecture

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EMC Distinguished Lectures sind EMV-spezifische Seminare von international anerkannten Experten aus Industrie, Hochschulen und Behörden. Die Vortragenden werden durch die IEEE EMC Society ausgewählt und unterstützt.

Treffen Sie Kollegen/-innen und bringen Sie sich auf den aktuellsten Stand von Technik und Forschung!

## **Prof. Seungyoung Ahn**

Korea Advanced Institute of Science and Technology (KAIST)  
Daejeon, South Korea

## **“Electromagnetic Compatibility for Wireless Power Transfer”**

<b>Datum:</b>	16.10.2020
<b>Zeit:</b>	11:00 -12:00 AM (UTC+2)
<b>Online:</b>	Zoom Meeting (click <a href="#">here</a> to join)

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**Hints:** the online meeting invitation will be sent out by email in case of any changes. Please **sign up in advance** (E-mail: [cheng.yang@tuhh.de](mailto:cheng.yang@tuhh.de))



## EMC Distinguished Lecture by Prof. Seungyoung Ahn

### Electromagnetic Compatibility for Wireless Power Transfer

**Abstract:** Wireless power transfer (WPT) is one of the most promising technologies opening the huge market currently in mobile devices and electric vehicles, and it expands the future applications to biomedical implants, wearable devices, IoT sensors, and so on. The WPT technology provides convenience and safety with its wireless connection, however, it is true that our electromagnetic environment is threatened by the unwanted electromagnetic field from the WPT system, and the concerns on the electromagnetic interference to other electronic devices or human bodies are consequently increasing.

This talk covers WPT technology and the issues related with the electromagnetic compatibility and electromagnetic field. Beginning with the basic concept and applications of the WPT system, recent advances in technical solutions for electromagnetic safety aspects of wireless power transfer system are reviewed. The current issues on standardization including the human body safety and the future technologies will be discussed, to eventually find out the directions to get answers for the questions on the electromagnetic safety of WPT systems.



## EMC Distinguished Lecture by Prof. Seungyoung Ahn

### Electromagnetic Compatibility for Wireless Power Transfer

**Biography: Prof. Seungyoung Ahn** received the B.S., M.S., and Ph.D. degrees in Electrical Engineering from the Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea, in 1998, 2000, and 2005, respectively. From 2005 to 2009, he was a Senior Researcher in Computer Systems Division in Samsung Electronics. From 2009 to 2011, he was a Research Professor at KAIST and designed magnetic resonant wireless power transfer system for electric vehicle applications. He is currently a tenured Associate Professor in Cho Chun Shik Graduate School of Green Transportation at KAIST. His main research interests include the electromagnetic compatibility and wireless power transfer technology. He has published more than 200 technical papers including 70 international journal papers in electromagnetic compatibility and wireless power transfer research areas..