



## General Information

2011 was the first year of the innovative wireless power transmission (WPT) technologies, systems and applications from this workshop. After Qi standard of an inductive coupling WPT was established in 2010, wireless charging products of a mobile phone with Qi standard are manufactured and sold in US and Japan in 2011. Some car manufacturers have started to invest in the resonant coupling WPT in 2011. In Japan, a commercial rectenna, rectifying antenna for a receiver of microwave power transmission, is produced in 2011. New technical committee (TC), MTT-26, for the field of wireless energy/power transmission, energy harvesting/conversion to wireless transfer and the related technologies was officially launched in June MTT ADCOM/TCC meeting during Microwave Week 2011 at Baltimore. The first IEEE MTT-S International Microwave Workshop Series (IMWS) on Innovative Wireless Power Transmission: Technologies, Systems, and Applications (IMWS-IWPT2011) was successfully finished with 63 technical papers and 176 attendees at Kyoto, Japan, in May 2011.

The year 2012 is more important for the WPT technologies. We have to discuss a variety of wireless power transmission technologies, for example, inductive, resonance, microwave, and energy harvesting, and their applications as well as the future of such technologies will be also debated in this workshop. This workshop is supported by MTT-S TC-26.

**Topics:** The topics of the workshop include, but not limited to, the following

1. Basic technologies for wireless power transfer systems
  - 1-1. Magnetic induction
  - 1-2. Resonance coupling
  - 1-3. Microwave transmission
  - 1-4. Coils, resonators, and antennas
  - 1-5. Other theoretical or experimental studies
2. Applications of wireless power transfer technologies
  - 2-1. Home/Industrial-appliances
  - 2-2. Electric vehicles
  - 2-3. RF-ID and electronic tags
  - 2-4. SPS and space/aeronautic applications
  - 2-5. Other applications
3. Power sources for wireless power transfer systems
  - 3-1. High-frequency power amplifiers (Class-E, Class-F, etc.)
  - 3-2. High-efficiency power sources (Switching power supply, Oscillator, etc.)
  - 3-3. Power devices (GaN, Silicon, Tube, etc.)
4. Rectifying devices, circuits, and rectennas
  - 4-1. Rectifying devices
  - 4-2. High-efficiency rectifying circuits
  - 4-3. Rectennas
5. Standardization, regulation, and biological effects
  - 5-1. Standardization and regulation including frequency, safety, and emissions limits
  - 5-2. Biological effects of electromagnetic fields
6. Energy harvesting and scavenging
  - 6-1. Devices and techniques for energy harvesting and scavenging
  - 6-2. Applications of energy harvesting and scavenging, such as wireless sensor network
7. Others

## Venue

Avanti Kyoto Hall, Ryukoku University, Kyoto, Japan

<http://www.ieee-jp.org/section/kansai/chapter/mtts/iwpt2012/venue.html>

## Important dates

Submission Deadline (no more than 4p abstract): **January 14, 2012**

Notification of Acceptance: **February 25, 2012**

Camera Ready Due (4 pages): **March 25, 2012**

Workshop Date: **May 10-11, 2012**

- All prospective authors will be notified as to whether their paper was accepted or rejected for publication by E-mail after February 25, 2012.
- Accepted papers will appear in the IMWS-IWPT workshop proceedings and will be included in IEEE Xplore.
- Note that at least one of the authors of accepted papers must attend the workshop to present its paper.
- The IMWS-IWPT2012 Prize will be given to the winners selected by the IWPT2012 Award Committee from all the participants presenting the paper at the workshop.

## PAPER SUBMISSION MUST BE RECEIVED BY JANUARY 14, 2012

**Abstract Guidelines:** Authors are invited to submit no more than four-page abstract in English. The abstract should explain clearly the content and relevance of the proposed technical contribution. The abstract will be peer-reviewed. On a separate page list the following information: (1) Title of the paper, (2) Name(s), affiliation(s), (3) Mailing address of corresponding author, (4) Presenting author, (6) Topic of Session.

Please use On-Line-Submission (<http://www.ieee-jp.org/section/kansai/chapter/mtts/iwpt2012/form/submission/>) to submit your contribution.

## Registration Fee

	IEEE members	Non IEEE members	Students
Early registration ( <b>by Mar 25</b> )	¥20,000JPY	¥25,000JPY	¥5,000JPY
Late registration ( <b>after Mar 26 to Apr. 15</b> ) And on site ( <b>after Apr.16, pay by cash</b> )	¥25,000JPY	¥30,000JPY	¥8,000JPY

**PRESENTING AUTHORS MUST PRE-REGISTER BY March 25, 2012** (Only pre-registered articles will appear in the final Technical Program and Xplore.)

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