



General Information

Microwave technologies are being used mainly for the purpose of communication and remote sensing, which can be found in our daily life. Considering the environmental problems of our Earth, we need to explore a new way of life with innovative technologies, which is an urgent issue today. What can the microwave technologies do for the future? One potential and attractive answer is to develop innovative microwave technologies for wireless power transmission so as to reduce power transmission cost and battery-related problems. J. C. Maxwell suggested that a radio wave is in the form of a power in the end of 19th century. N. Tesla carried out the first WPT experiment even though he failed it in the early 20th century. W. Brown demonstrated the possibility of a wireless power transmission via microwaves in 1960's. Following these pioneering works, the Space Solar Power Satellite has been a principal application platform to conduct subsequent microwave power transmission research. In 21st century, we have exploited numerous applications which are suitable for the use of wireless power transmissions such as ICs, LED as tiny power digital device, electric vehicle and plug-in hybrid car. There exist several types of wireless power transmission including inductive power transmission, resonance power transmission, and power transmission via microwaves. The wireless power transmission technology is an emerging and innovative application of microwaves with many interesting features and characteristics. We can deploy a number of wireless power transmission technologies for specifically targeted applications. In this workshop, speakers with contributed and invited papers from all over the world will present and discuss a variety of wireless power transmission technologies, systems and their applications and the future of such technologies will also be debated.

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

1. Application and System
 - 1.1 Long distance applications and systems of wireless power transmission
 - 1.2 Short distance applications and systems of wireless power transmission
 - 1.3 Other applications and systems of wireless power transmission including Energy Harvesting
2. Standardization, Regulation, and Biological Effects
 - 2.1 Standardization and regulation including frequency, safety and emissions limits
 - 2.2 Biological effects of electromagnetic fields
 - 2.3 Others
3. Antenna, Coupling, and Transmission
 - 3.1 Antenna theory and technologies for wireless power transmission
 - 3.2 Phased array theory and technologies which include phased array, beam forming, and DOA for microwave power transmission
 - 3.3 Coupling theory and technologies via resonators or inductors
 - 3.4 Others
4. Circuits, Components and Devices
 - 4.1 Rectenna and rectifying circuits theory and technologies for wireless power transmission
 - 4.2 Power amplifier and microwave tube theory and technologies
 - 4.3 Circuits and components theory and technologies for wireless power transmission
 - 4.4 Devices theory and technologies for wireless power transmission
 - 4.5 Others
5. Others

Venue

Uji Oabaku Plaza, Uji campus of Kyoto University, Uji, Kyoto, Japan
<http://www.ieee-jp.org/section/kansai/chapter/mtts/iwpt2011/venue.html>

Important dates

Submission Deadline (1p abstract): **January 7, 2011**

Notification of Acceptance: **February 25, 2011**

Camera Ready Due (4 pages): **March 25, 2011**

Workshop Date: **May 12-13, 2011**

- All prospective authors will be notified as to whether their paper was accepted or rejected for publication by E-mail after February 25, 2011.
- 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-IWPT2011 Prize will be given to the winners selected by the IWPT2011 Award Committee from all the participants presenting the paper at the workshop.

PAPER SUBMISSION MUST BE RECEIVED BY JANUARY 7, 2011

Abstract Guidelines: Authors are invited to submit a one-page abstract of no less than 400 words in English. Only two associated figures can be included in the page. 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/iwpt2011/>) to submit your contribution.

Registration Fee

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

PRESENTING AUTHORS MUST PRE-REGISTER BY March 25, 2011 (Only pre-registered articles will appear in the final Technical Program and Xplore.)

Workshop Co-Chairs

Naoki Shinohara (Kyoto University)

Shigeo Kawasaki (JAXA)

Ikuo Awai (Ryukoku University)

Technical Program Committee Co-Chairs

Yohei Ishikawa (Murata Corporation)

Yoshiyuki Fujino (NICT)

TPC Members

Kai Chang (Texas A&M University)

Debabani Choudhury (Intel Corporation)

Giorgio Franceschetti (Universit  degli Studi di Napoli)

Kazuhiko Honjo (The University of Electro-Communications)

Tian-Wei Huang (National Taiwan University)

Kenji Itoh, (Kanazawa Institute for Technology)

Tatsuo Itoh (UCLA)

Tadashi Kawai (University of Hyogo)

Nobuyoshi Kikuma (Nagoya Institute of Technology)

Kimiya Komurasaki (University of Tokyo)

Hai-Young Lee (Ajou University)

Jenshan Lin (University of Florida)

Andrea Massa (University of Trento,)

Hidetoshi Matsuki (Tohoku University)

Junji Miyakoshi (Kyoto University)

Amir Mortazawi (University of Michigan)

Shigeji Nogi (Okayama University)

Yasuo Ohno (Tokushima University)

Koichi Ogawa (Toyama University)

Kazuo Satoh (Toyota Centoral R&D Laboratory, Inc.)

Tomohiro Seki (NTT co.)

Blagovest Shishkov (Bulgarian Academy of Sciences)

Hiroki Shoki (Toshiba co.)

Tadashi Takano (Nihon University)

Ke Wu (Ecole Polytechnique de Montreal)

Masanobu Yajima (JAXA)

Local Arrangements Chairs

Takuo Kashiwa (Furuno Electric co., Ltd.)

Tomohiko Mitani (Kyoto University)

General Affairs

Toshio Ishizaki (Ryukoku University)

Publications Chair

Tetsuya Ueda (Kyoto Institute of Technology)

Website Chair

Yasushi Horii (Kansai University)

Finance Chair

Shoichi Kitazawa (ATR)

Advisory Committee

IEEE MTT-S President

Samir M. El-Ghazaly

IEEE MTT-S Transnational Committee Chair

Ke Wu

IEEE MTT-S Meetings and Symposia Chair

Robert Weigel

Contact: iwpt-sub@rish.kyoto-u.ac.jp (Workshop Secretariat)

