



2013 IEEE Wireless Power Transfer (WPT) Conference Program

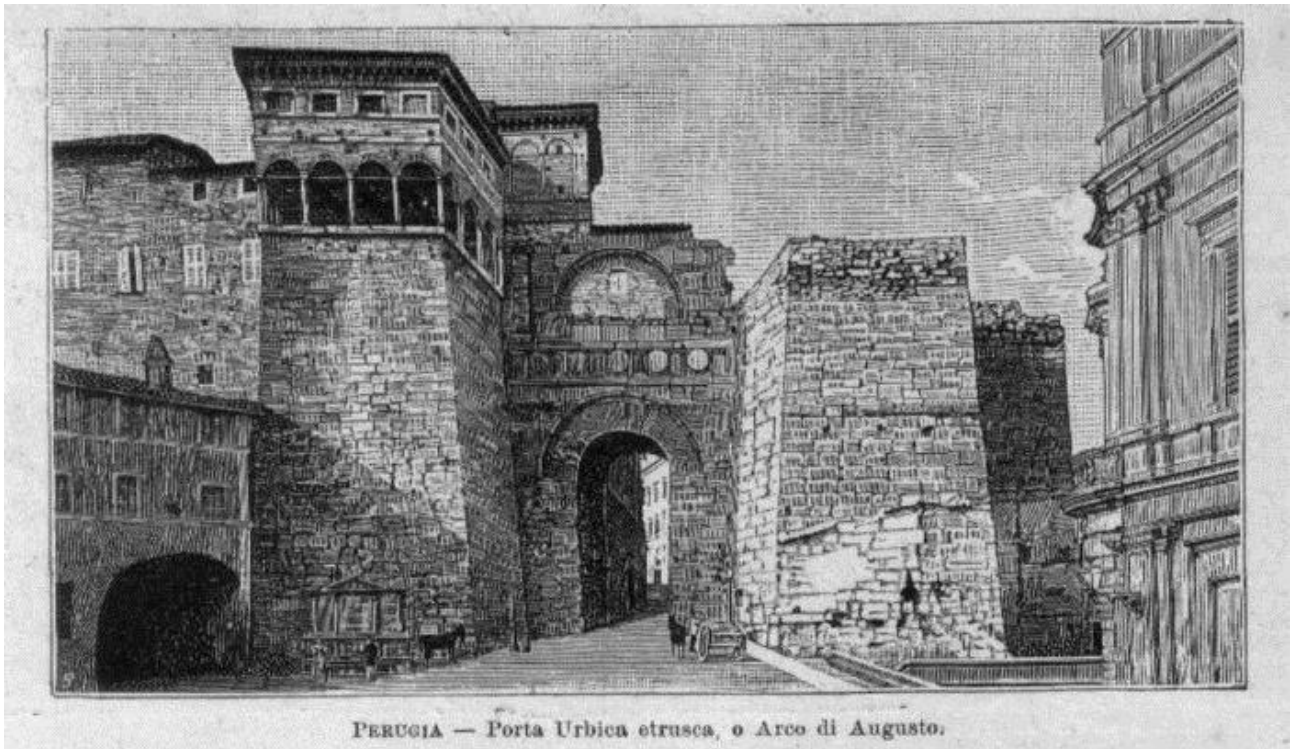


May 15 – 16, 2013
Perugia (Italy)



2013 IEEE Wireless Power Transfer (WPT) Conference

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Milos Mazanek (University of Prague, Czech Republic)



Wednesday, May 15, 2013

Time	Room	Theme
08:30-9:00	Sala Goldoni	Registration
09:00-9:30	Aula Magna	WE-WEL-1: Welcome session
09:30-10:30	Aula Magna	WE-KS-1 : Keynote speech, Zoya Popovic
10:30-10:50	Sala Goldoni	Coffee break
10:50-11:50	Aula Magna	WE-O-1 : Basic Technologies for Wireless Power Transfer Systems
11:50-12:30	Aula Magna	WE-O-2 : Power Sources for Wireless Power Transfer Systems
12:30-13:30	Sala Goldoni	WE-P-1 : Poster session I Lunch
13:30-14:30	Aula Magna	WE-KS-2 : Keynote speech, Kamil Grajski
14:30-15:10	Aula Magna	WE-O-3 : Energy Harvesting and Scavenging
15:10-15:30	Sala Goldoni	Coffee break
15:30-16:30	Aula Magna	WE-O-4 : Applications of Wireless Power Transfer
20:00	Hotel Brufani	Gala Dinner

Thursday, May 16, 2013

Time	Room	Theme
09:00-10:00	Aula Magna	TH-KS-1 : Keynote speech, Shigeo Kawasaki
10:00-11:00	Aula Magna	TH-O-1 : Rectifying Devices, Circuits and Rectennas
11:00-11:30	Sala Goldoni	Coffee break
11:30-12:40	Aula Magna	TH-O-2 : Applications of Wireless Power Transfer
12:40-13:40	Sala Goldoni	TH-P-1 : Poster session II Lunch
13:40-15:00	Aula Magna	TH-O-3 : Basic Technologies for Wireless Power Transfer Systems
15:00-15:20	Sala Goldoni	Coffee break
15:20-16:00	Aula Magna	TH-O-4 : Standardization, Regulation and Biological Effects
16:00-17:00	Aula Magna	TH-KS-2 : Special talk and Exhibition, Takashi Ohira
17:00-17:15	Aula Magna	TH-CLO-1: Closing session

Wednesday, May 15, 2013

REGISTRATION (8:30-9:00)

Sala Goldoni

Session WE-WEL-1 (09:00-09:30): WELCOME AND OPENING SESSION

Chair: Luca Roselli (University of Perugia, Italy)
Co-Chair: Federico Alimenti (University of Perugia, Italy)

Session WE-KS-1 (09:30-10:30): KEYNOTE SPEECH

Chair: Federico Alimenti (University of Perugia, Italy)
Co-Chair: Luca Roselli (University of Perugia, Italy)

WE-KS-1-1 (9:30-10:30)

Far-Field Wireless Power Delivery and Power Management for Low-Power Sensors

Z. Popovic (University of Colorado, Boulder, United States)

COFFEE BREAK (10:30-10:50)

Sala Goldoni

Session WE-O-1 (10:50-11:50): WPT TECHNOLOGIES BASED ON RESONANT DEVICES

Chair: Paolo Mezzanotte (University of Perugia, Italy)
Co-Chair: Yohei Ishikawa (Murata Manufacturing Co., Ltd., Japan)

WE-O-1-1 (10:50-11:10)

Orientation Insensitive Power Transfer by Magnetic Resonance in Mobile Devices

O. Jonah¹, S. V. Georgakopoulos¹, M. Tentzeris² (¹Florida International University, Miami, United States, ²Georgia Institute of Technology, Atlanta, United States)

WE-O-1-2 (11:10-11:20)

Experimental Analysis of Double Spiral Resonator for Wireless Power Transmission

W. Wei, Y. Kawahara, T. Asami (University of Tokyo, Tokyo, Japan)

WE-O-1-3 (11:20-11:40)

A Consideration of Efficiency Improvement of Transmitting Coil Array in Wireless Power Transfer with Magnetically Coupled Resonance

K. Miwa, H. Mori, N. Kikuma, H. Hirayama, K. Sakakibara (Nagoya Institute of Technology, Nagoya, Japan)

WE-O-1-4 (11:40-11:50)

Resonant Wireless Power Transfer: Investigation of Radiating Resonances

M. Dionigi¹, G. Franceschetti², M. Mongiardo¹ (¹University of Perugia, Perugia, Italy, ²University of Trento, Povo, Italy)

Session WE-O-2 (11:50-12:30): POWER SOURCES FOR WPT SYSTEMS

Chair: Apostolos Georgiadis (CTTC, Spain)

Co-Chair: Takashi Ohira (Toyohashi University of Technology, Japan)

WE-O-2-1 (11:50-12:00)

Spatially-Combined Multisine Transmitter for Wireless Power Transmission

A. S. Boaventura, N. B. Carvalho (Instituto de Telecomunicacoes, Aveiro, Portugal)

WE-O-2-2 (12:00-12:20)

Zero Phase Difference Capacitance Control (ZPDCC) for Magnetically Resonant Wireless Power Transmission

S. Iguchi, P. Yeon, H. Fuketa, K. Ishida, T. Sakurai, M. Takamiya (University of Tokyo, Meguro-ku, Japan)

WE-O-2-3 (12:20-12:30)

Advanced GaN-based High Frequency Power Amplifiers

V. Camarchia¹, E. Cipriani², P. Colantonio², G. Ghione¹, F. Giannini², M. Pirola¹, R. Quaglia¹ (¹Politecnico di Torino, Torino, Italy, ²Università Roma TorVergata, Roma, Italy)

LUNCH (12:30-13:30)

Sala Goldoni (buffet in parallel with WE-P-1)

Session WE-P-1 (12:30-13:30): POSTER SESSION I

Chair: Marco Dionigi (University of Perugia, Italy)

Co-Chair: Chiara Mariotti (University of Perugia, Italy)

WE-P-1-1

Organic Frequency Doubler RFID Tag Exploiting 7.5-MHz Wireless Power Transfer

M. Virili, F. Alimenti, L. Roselli, P. Mezzanotte, M. Dionigi (University of Perugia, Perugia, Italy)

WE-P-1-5

Calibration Method of Retrodirective Antenna Array for Microwave Power Transmission

Y. Dong, S. Dong, Y. Wang, L. Gong (China Academy of Space Technology (Xi'an), Xi'an, China)

WE-P-1-6

A Novel Qi-standard Compliant Full-bridge Wireless Power Charger for Low Power Devices

M. Galizzi¹, M. Caldara¹, V. Re¹, A. L. Vitali² (¹Università di Bergamo, Dalmine, Italy, ²STMicroelectronics, Agrate Brianza, Italy)

WE-P-1-7

Optimum Frame Size Evaluation Framework for Efficient Tag Identification in Passive RFID Systems

T. Agrawal¹, P. K. Biswas¹, A. D. Raoot¹, R. Sharma², ¹NITIE, Mumbai, India, ²IIT Ropar, Rupnagar, India

WE-P-1-8

Thermal Analysis for Temperature Robust Wireless Power Transfer Systems

K. Hwang¹, S. Chung², U. Yoon², M. Lee³, S. Ahn¹, (¹Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea, ²Korea Advanced Institute of Science and Technology Wireless Power Transfer Research Center, Daejeon, Republic of Korea, ³Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea)

WE-P-1-9

Design of Buried Power Line for Roadway-Powered Electric Vehicle System

J. Shin¹, B. Song¹, S. Shin¹, S. Chung¹, Y. Kim¹, G. Jung¹, S. Jeon² (¹Korea Advanced Institute of Science and Technology (KAIST), Daejeon, Republic of Korea, ²Pukyong National University, Busan, Republic of Korea)

WE-P-1-10

Design of a Pickup with Compensation Winding for On-Line Electric Vehicle (OLEV)

B. Song¹, J. Shin¹, S. Chung¹, S. Shin¹, S. Lee¹, Y. Kim¹, G. Jung¹, S. Jeon² (¹KAIST, Daejeon, Republic of Korea, ²Pukyong National University, Busan, Republic of Korea)

WE-P-1-11

A New Solar Power Satellite System Faced to Engineering: Concentric Disc

S. Dong¹, H. Yu², Y. Dong¹, L. Gong¹, Y. Wang¹ (¹CAST(Xi'an), Xi'an, China, ²CAST(Xi'an), Xi'an, China)

WE-P-1-13

Rigorous Modeling of Mid-range Wireless Power Transfer Systems Based on Royer Oscillators

A. Costanzo², M. Dionigi¹, F. Mastri², M. Mongiardo¹ (¹University of Perugia, Perugia, Italy, ²University of Bologna, Bologna, Italy)

WE-P-1-14

Mode Locked Oscillator Arrays for Efficient Wireless Power Transmission

A. Georgiadis, A. Collado (CTTC, Castelldefels, Spain)

TH-P-1-10

Wireless Power Transfer System for High Power Application and a Method of Segmentation

S. Shin¹, J. Shin¹, B. Song¹, S. Lee¹, Y. Kim¹, G. Jung¹, S. Jeon² (¹KAIST, Daejeon, Republic of Korea, ²Pukyong National University, Busan, Republic of Korea)

Session WE-KS-2 (13:30-14:30): KEYNOTE SPEECH

Chair: Luca Roselli (University of Perugia, Italy)
Co-Chair: Federico Alimenti (University of Perugia, Italy)

WE-KS-2-1 (13:30-14:30)

Introduction to the Alliance for Wireless Power Loosely-Coupled Wireless Power Transfer System Specification Version 1.0

R. Tseng, B. von Novak, S. Shevde, K. A. Grajski¹, (¹Qualcomm Technologies, Inc., San Diego, United States)

Session WE-O-3 (14:30-15:10): ENERGY HARVESTING AND SCAVENGING

Chair: Manos M. Tentzeris (Georgia Institute of Technology, United States)
Co-Chair: Shigeo Kawasaki (Japan Aerospace Exploration Agency, Japan)

WE-O-3-1 (14:30-14:40)

Scalable Adaptive Wireless Powering of Multiple Electronic Devices in an Over-moded Cavity

S. Rahimizadeh, S. Korhummel, B. Kaslon, Z. Popovic (University of Colorado at Boulder, Boulder, United States)

WE-O-3-2 (14:40-15:00)

High Efficiency Rectification by SOI based Gate Controlled Diode for RF Energy Harvesting

R. Umesao, J. Ida, K. Kawabata, S. Tashino, K. Noguchi, K. Itoh (Kanazawa Institute of Technology, Nonoichi, Japan)

WE-O-3-3 (15:00-15:10)

An Integrated RF Energy Harvester for UHF Wireless Powering Applications

S. Scorcioni¹, L. Larcher¹, A. Bertacchini¹, L. Vincetti², M. Maini² (¹University of Modena and Reggio Emilia, Reggio Emilia, Italy, ²University of Modena and Reggio Emilia, Modena, Italy)

COFFEE BREAK (15:10-15:30)

Sala Goldoni

Session WE-O-4 (15:30-16:30): WPT SENSOR APPLICATIONS

Chair: Kenjiro Nishikawa (Kagoshima University, Japan)
Co-Chair: Andrea Massa (University of Trento, Italy)

WE-O-4-1 (15:30-15:50)

Wireless Sensor Network in Reusable Vehicle Rocket and Low-power 20-30 GHz Amplifier MMIC

R. Takamori¹, M. Kawasaki¹, H. Seita², K. Nishimori³, N. Honma⁴, K. Nishikawa¹, Y. Maru⁵, S. Kawasaki⁵ (¹Kagoshima University, Kagoshima, Japan, ²UM-service LTD., Shinagawa, Japan, ³Niigata University, Niigata, Japan, ⁴Iwate University, Morioka, Japan, ⁵JAXA, Sagami-hara, Japan)

WE-O-4-2 (15:50-16:00)

Wireless Power Transfer System for Diagnostic Sensor on Rotating Spindle

G. Lee¹, Y. Kim², W. Park³, H. Gwak⁴ (¹Research Institute of Industrial Science & Technology, Pohang, Republic of Korea, ²Handong Global University, Pohang, Republic of Korea, ³Pohang University of Science and Technology, Pohang, Republic of Korea, ⁴POSCO, Pohang, United States)

WE-O-4-3 (16:00-16:20)

Smart Floor: Indoor Navigation Based on RFID

R. Gonçalves¹, J. Reis¹, E. Santana¹, N. B. Carvalho², P. Pinho³, L. Roselli⁴ (¹Instituto Telecomunicações, Aveiro, Portugal, ²Universidade de Aveiro, Aveiro, Portugal, ³Instituto Superior de Engenharia de Lisboa, Lisboa, Portugal, ⁴University of Perugia, Perugia, Italy)

WE-O-4-4 (16:20-16:30)

Wireless Power Transfer for Sensors and Systems Embedded in Fiber Composites

I. Mayordomo, T. Dräger, J. Alayon, J. Bernhard (Fraunhofer IIS, Nuremberg, Germany)

GALA DINNER (20:00)

Hotel Brufani (Piazza Italia, n. 12)



Thursday, May 16, 2013

Session TH-KS-1 (9:00-10:00): KEYNOTE SPEECH

Chair: Federico Alimenti (University of Perugia, Italy)
Co-Chair: Luca Roselli (University of Perugia, Italy)

TH-KS-1-1 (9:00-10:00)

The Green Energy Harvesting Winds by the RF/Microwave Power Transmission

S. Kawasaki¹, ¹Dept. of Spacecraft Engineering (Institute of Space and Astronautical Science (ISAS), Japan Aerospace Exploration Agency (JAXA), Kanagawa, Japan)

Session TH-O-1 (10:00-11:00): RECTIFYING DEVICES CIRCUITS AND RECTENNAS

Chair: Alessandra Costanzo (University of Bologna, Italy)
Co-Chair: Zoya Popovic (University of Colorado, United States)

TH-O-1-1 (10:00-10:20)

DC Power Pattern Analysis of N-by-N Staggered Pattern Charge Collector and N2 Rectenna Array

B. R. Marshall, C. R. Valenta, G. D. Durgin (Georgia Institute of Technology, Atlanta, United States)

TH-O-1-2 (10:20-10:30)

A Harmonically-Terminated Two-Gram Low-Power Rectenna on a Flexible Substrate

S. Korhummel, D. G. Kuester, Z. Popovic (University of Colorado, Boulder, United States)

TH-O-1-3 (10:30-10:50)

Numerical Analysis of an Innovative Energy-harvesting System in the Infrared Region

M. Aldrigo¹, D. Masotti¹, A. Costanzo², V. Rizzoli¹ (¹University of Bologna, Bologna, Italy, ²University of Bologna, Cesena, Italy)

TH-O-1-4 (10:50-11:00)

Design of a Dual-band Rectifier for Wireless Power Transmission

D. Wang, R. Negra (RWTH Aachen University, Aachen, Germany)

COFFEE BREAK (11:00-11:30)

Sala Goldoni

Session TH-O-2 (11:30-12:40): WPT APPLICATIONS

Chair: Kamil A. Grajski (Qualcomm Technologies, Inc., United States)

Co-Chair: Peter Russer (Technical University of Munich, Germany)

TH-O-2-2 (11:30-11:50)

Structure of Handheld Resonant Magnetic Coupling Charger (HH-RMCC) for Electric Vehicle Considering Electromagnetic Field

C. Song¹, H. Kim¹, S. Kong², D. H. Jung², I. Kim³, Y. Kim³, J. Kim², J. Kim² (¹Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea, ²Korea Advanced Institute of Science and Technology, Daejeon, Republic of Korea, ³ENERCONSTech Co., Ltd., Seoul, Republic of Korea)

TH-O-2-3 (11:50-12:00)

Increasing the RFID Readability Range Using Wireless Power Transmission Enhancements

R. Gonçalves¹, N. B. Carvalho², P. Pinho³ (¹Instituto de Telecomunicações, Aveiro, Portugal, ²Universidade de Aveiro, Aveiro, Portugal, ³Instituto Superior de Engenharia de Lisboa, Lisboa, Portugal)

TH-O-2-4 (12:00-12:10)

Feasibility of a Battery-less Wirelessly-powered RFID Remote Control System

A. S. Boaventura, N. B. Carvalho (Instituto de Telecomunicações, Aveiro, Portugal)

TH-O-2-5 (12:10-12:30)

Study on Panel Gradient Estimation System for Panel-Structure Solar Power Satellite / Station

T. Ishikawa, N. Shinohara (Research Institute for Sustainable Humanosphere, Kyoto University, Gokasho, Uji,, Japan)

TH-O-2-6 (12:30-12:40)

Design Considerations for a Moving Field Inductive Power Transfer System

J. A. Russer, P. Russer (Technical University Munich, Munich, Germany)

LUNCH (12:40-13:40)

Sala Goldoni (buffet in parallel with TH-P-1)

Session TH-P-1 (12:40-13:40): POSTER SESSION II

Chair: Marco Dionigi (University of Perugia, Italy)

Co-Chair: Marco Virili (University of Perugia, Italy)

TH-P-1-1

Influence of Magnetic Design Choices on the Quality Factor of Off-the-Shelf Wireless Power Transmitter and Receiver Coils

S. Wielandt, N. Stevens (KU Leuven, Heverlee, Belgium)

TH-P-1-2

Wireless Power Transfer with Artificial Magnetic Conductors

J. Wu, B. Wang, W. S. Yerazunis, K. H. Teo (Mitsubishi Electric Research Laboratories, Cambridge, United States)

TH-P-1-3

Flexible Wireless Energy Transfer Systems by Carbon Fiber as a Dielectric Material: Study and Experiments

S. Oruganti¹, F. Bien² (¹Ulsan National Institute of Science and Technology, Ulsan, Republic of Korea, ²Ulsan National Institute of Science and Technology, Ulsan, Republic of Korea)

TH-P-1-4

The C-Band MPT Rectifier Using a HEMT without Bonding-Wire Connection for a Space Health Monitoring System

S. Yoshida¹, G. Fukuda², Y. Kobayashi¹, S. Tashiro², T. Noji³, K. Nishikawa¹, S. Kawasaki¹ (¹JAXA, Sagamihara, Japan, ²Tokyo University of Science, Shinjyuku, Japan, ³Tokyo Metropolitan University, Tokyo, Japan)

TH-P-1-5

Improvement of Coupling Coefficient by Designing a Spiral Pattern Formed on a Printed Circuit Board

S. Konno, T. Yamamoto, K. Koshiji (Tokyo University of Science, Noda-shi, Japan)

TH-P-1-6

A New Configuration of Magnetic Coupled Power Transfer using Parallel Line Feeder

T. Higashino¹, Z. Ma¹, M. Okada¹, Y. Tatsuta², Y. Goto², Y. Tsuruda², R. Tanaka² (¹Nara Institute of Science and Technology, Ikoma, Japan, ²Daihen, Osaka, Japan)

TH-P-1-7

Microwave-Band Wireless Power Transfer System Using Ceramic Dielectric Resonators

K. Nishikawa, T. Ishizaki (Ryukoku University, Otsu, Japan)

TH-P-1-8

Effect of Hop Counts on Power Division Ratio in Multi-hop Power Transfer via Magnetic Resonance

A. Shimada¹, Y. Ito¹, H. Uehara², T. Ohira² (¹Toyohashi University of Technology, Toyohashi, Japan, ²Toyohashi University of Technology, Toyohashi, Japan)

TH-P-1-9

Design and Implementation of a Rectenna for Satellite Application

A. Takacs¹, H. Aubert¹, L. Despoisse², S. Fredon³ (¹Cnrs Laas, Toulouse, France, ²Thales Alenia Space, Cannes, France, ³Cnes, Toulouse, France)

TH-P-1-11

Analysis of Rectifier Operation with FSK Modulated Input Signal

H. Sakaki¹, S. Yoshida², K. Nishikawa¹, S. Kawasaki² (¹Kagoshima University, Kagoshima, Japan, ²Japan Aerospace Exploration Agency, Sagamihara, Japan)

TH-P-1-12

Advances on Remote Wireless Power Transmission at the ELEDIA Research Center

G. Franceschetti, G. Oliveri, P. Rocca, A. Massa (ELEDIA Research Center, Trento, Italy)

TH-P-1-13

To Improve Wireless Power Transmission Efficiency by Using Coil Arrays

S. Pu, H. Hui (National University of Singapore, Singapore, Singapore)

TH-P-1-14

Modeling Inductive Coupling for Wireless Power Transfer to Integrated Circuits

R. J. Matias¹, M. B. Cunha², R. M. Martins³ (¹Aveiro's University, Aveiro, Portugal, ²Aveiro's University, Aveiro, Portugal, ³Aveiro's University, Aveiro, Portugal)

TH-P-1-15

Mobile Wireless Power Transfer System Suppressing Reflection by Pick-up and Reflector

T. Ishizaki, G. Kitano (Ryukoku University, Otsu, Japan)

WE-P-1-12

Graphene-based Wireless Communications Systems: Analysis of the EM-quantum Transport of Nano-patch Antennas

L. Pierantoni¹, D. Mencarelli¹, F. Coccetti² (¹Università Politecnica delle Marche, Ancona, Italy, ²Laboratoire d'Analyse et d'Architecture des Systèmes, Toulouse, France, ³Istituto Nazionale di Fisica Nucleare, Frascati, Italy)

Session TH-O-3 (13:40-15:00): BASIC TECHNOLOGIES FOR WPT SYSTEMS

Chair: Ikuo Awai (Ryutech Corporation, Japan)

Co-Chair: Nuno Borges Carvalho (Universty of Aveiro, Portugal)

TH-O-3-1 (13:40-13:50)

Radiative Power Transmission from Dipolar Sources

C. L. Moorey, W. Holderbaum, B. Potter (University of Reading, Reading, United Kingdom)

TH-O-3-2 (13:50-14:10)

Position Detection for Transcutaneous Energy Transmission System for Capsule Endoscope

T. Yamamoto, K. Koshiji (Tokyo University of Science, Noda-shi, Japan)

TH-O-3-3 (14:10-14:20)

Fabrication of a New High-performance WPT system by Electric Energy Confinement

I. Awai¹, Y. Sawahara², T. Ishizaki² (¹Ryutech Corporation, Otsu, Japan, ²ryukoku University, Otsu, Japan)

TH-O-3-4 (14:20-14:30)

Positional Characteristics of Capacitive Power Transfer as a Resonance Coupling System

T. Komaru, H. Akita (DENSO corporation, Kariya, Japan)

TH-O-3-5 (14:30-14:50)

A 13.56 MHz Wireless Power Transfer System without Impedance Matching Networks

M. Fu, T. Zhang, X. Zhu, C. Ma (University of Michigan and Shanghai Jiao Tong University Joint Institute, Shanghai, China)

TH-O-3-6 (14:50-15:00)

Impedance Matching Considering Cross Coupling for Wireless Power Transfer to Multiple Receivers

J. Kim, H. Son, D. Kim, Y. Park (University of Science & Technology (UST) and Korea Electrotechnology Research Institute (KERI), Ansan, Republic of Korea)

COFFEE BREAK (15:00-15:20)

Sala Goldoni

Session TH-O-4 (15:20-16:00): STANDARDIZATION, REGULATION AND BIOLOGICAL EFFECTS

Chair: Naoki Shinohara (Kyoto University, Japan)

Co-Chair: Milos Mazanek (University of Prague, Czech Republic)

TH-O-4-1 (15:20-15:30)

3-Coil Resonance-based Wireless Power Transfer System for Implantable Electronic

Y. Yi, U. Buttner, Y. Fan, I. Foulds (King Abdullah University of Science and Technology, Jeddah, Saudi Arabia)

TH-O-4-2 (15:30-15:50)

Operating Frequency Selection for Loosely Coupled Wireless Power Transfer Systems with Respect to RF Emissions and RF Exposure Requirements

J. Nadakuduti, L. Lu, P. Guckian (Qualcomm Technologies, Inc, San Diego, United States)

TH-O-4-3 (15:50-16:00)

Effect of Via-Wheel Power Transfer System on Human Body

Q. Yuan, T. Ishikawa (Sendai National College of Technology, Senda, Japan)

Session TH-KS-2 (16:00-17:00): SPECIAL TALK AND EXHIBITION

Chair: Luca Roselli (University of Perugia, Italy)

Co-Chair: Federico Alimenti (University of Perugia, Italy)

TH-KS-2-1 (16:00-17:00)

Via-Wheel Power Transfer to Vehicles in Motion

Takashi Ohira (Toyoashi University of Technology, Japan)

Session TH-CLO-1 (17:00-17:15): CLOSING SESSION

Chair: Luca Roselli (University of Perugia, Italy)

Co-Chair: Federico Alimenti (University of Perugia, Italy)

Perugia Map (Downtown)



Legenda

- 1: Conference location (Palazzo Gallenga, Università per Stranieri)
- 2: Gala dinner location (Hotel Brufani, Piazza Italia, n.12)