Workshop: "Current Challenges for Wireless Power Transfer"

Chairs: Seyed (Reza) Zekavat (Michigan Tech), Darel Preble (Space Solar Power Institute)
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Preliminary (WPT) Technical Program

WPT Session 1
Welcome, Introduction & Peter Glaser Memorial Keynotes

Chair: Darel Preble (Space Solar Power Institute, USA)
09:00 Welcome and Introduction to Current Challenges for WPT
Seyed (Reza) Zekavat (Michigan Technological University, USA)
09:15 Peter Glaser Memorial Address
Hiroshi Matsumoto-san (Kyoto University, Japan)
09:30 Solar Power Satellite Frequency Selection
James McSpadden (Raytheon, USA)
Christopher Valenta (Georgia Tech Research Institute - Electro-optical Systems Laboratory, USA); Gregory Durgin (Georgia Tech, USA)

10:30- 11:00 Coffee Break

WPT Session 2
Antenna Theory and Practice for Power and Information Transfer

Chair: Darel Preble (Space Solar Power Institute, USA)
11:00 Simultaneous Wireless Information and Power Transfer with Co-Channel Interference
Lansheng Hu (Xi'an Jiaotong University, P.R. China); Chao Zhang (Xi'an Jiaotong University, P.R. China); Jing Xu (Xi'an Jiaotong University, P.R. China)
11:30 Antenna Theory, Design, and Demonstrations of the Role of Antennas in Wireless Power Transfer Application
Timothy Cash (Optimal Solutions and Technologies, USA)
12:00 Using a Pico-satellite Paradigm to Verify and Validate SSP at a Low cost to first power
James Woods (Silver High Energy, USA)
12:30 Panel Discussion on WPT Antenna Design
Christopher Valenta (Georgia Tech Research Institute - Electro-optical Systems Laboratory, USA); Timothy Cash (Optimal Solutions and Technologies, USA); James McSpadden (Raytheon, USA); James Woods (Silver High Energy, USA)
12:40 - 14:00 Lunch

WPT Session 3

New Answers to Old Challenges for Space Solar Power
Chair: Seyed (Reza) Zekavat (Michigan Technological University, USA)
14:00 Over the Horizon Wireless Power Transmission, a Low-Cost Precursor for Space Solar Power
  Tanwin Chang (Deep Phase Labs, USA); Stephen J Blank (New York Institute of Technology, USA); Paul Jaffe (NRL, USA)
  Chengcheng Zhang (Beijing University of Posts and Telecommunications, P.R. China); Hui Zhao (Beijing University of Posts and Telecommunications, P.R. China); Wenfang Li (Beijing University of Posts and Telecommunications, P.R. China); Kan Zheng (Beijing University of Posts and Telecommunications, P.R. China); Juwo Yang (Beijing University of Posts and Telecommunications (BUPT), P.R. China)
14:50 Challenges of Wireless Power Transfer for Prolonging User Equipment (UE) Lifetime in Wireless Networks
  Melike Erol-Kantarci (Clarkson University, USA); Hussein Mouftah (University of Ottawa, Canada)
15:15 Panel Discussion on System Optimization for WPT lifetime optimization
  Melike Erol-Kantarci (Clarkson University, USA); Tanwin Chang (Deep Phase Labs, USA); Chengcheng Zhang (Beijing University of Posts and Telecommunications, P.R. China)

15:40 - 16:10 Coffee Break

WPT Session 4

Solar Energy for Today and Tomorrow
Chair: Seyed (Reza) Zekavat (Michigan Technological University, USA)
16:10 Space Solar Power - Energy, Economy and Environmental Issues for Today and Tomorrow
  Darel Preble (Space Solar Power Institute, USA)
16:46 NSF Investments in Solar Energy
  Gregory Rorrer (National Science Foundation, USA)
17:16 Panel Discussion on Sustainable Solar Energy Policy and Investment in Renewable Energy Policy
  Darel Preble (Space Solar Power Institute, USA); Gregory Rorrer (National Science Foundation, USA); Gail Tverberg (Space Solar Power Institute, USA)