

SPECIAL SESSIONS

Nov. 13, (Tue.) 8:20-10:00

SS-1: Dynamics of Electrical Machines and Systems for Green Energy Generation (I) Room: Sapphire

Organizer: Marija Mirošević (University of Dubrovnik, Croatia)

Co-organizer: Zlatko Maljković (University of Zagreb, Croatia)

1. A review of key points of a biogas plant. A European perspective
Miguel Sanz-Bobi* (Comillas Pontifical University)* Fernando de Cuadra (Comillas Pontifical University) Carlos Batlle (Comillas Pontifical University)
2. Refurbishment of Small Hydro Power Plant
Srecko Bojic (Energy Institute Inc.) Domagoj Bozic (Energy Institute Inc.) Milutin Pavlica* (Energy Institute Inc.)*
3. Methodology for Definition of Requirements for Small Hydropower Plants Development
Hubert Basic* (HEP Renewable Energy Sources)*
4. Design of the Monitoring System for a Synchronous Generators in Hydro Power Plant
Mario Vrazic* (University of Zagreb, FER)* Marinko Kovacic (University of Zagreb, Faculty of Electrical Engineering and Computing) Zlatko Hanic (University of Zagreb, Faculty of Electrical Engineering and Computing)

Nov. 13, (Tue.) 10:25-12:30

SS-2: Dynamics of Electrical Machines and Systems for Green Energy Generation (II)

Room: Sapphire

Organizer: Marija Mirošević (University of Dubrovnik, Croatia)

Co-organizer: Zlatko Maljković (University of Zagreb, Croatia)

1. The Dynamics of Isolated Electrical Grid During Short Term Interruptions
Marija Mirosevic* (University of Dubrovnik)* Zlatko Maljkovic (University of Zagreb)
2. Dynamic Performance and Analysis of Direct Torque Control Method Based on DSP for PMSM Drives
Selin OZCIRA* (Yildiz Technical University)* Nur BEKIROGLU (Yildiz Technical University) Ibrahim SENOL (Yildiz Technical University)
3. Oscillations in Hydropower Bulb Units
Zlatko Maljkovic* (University of Zagreb)* Mario Vrazic (University of Zagreb)
Marija Mirosevic (University of Dubrovnik)
4. Development of Solar Charging System for Plug-in Hybrid Electric Vehicles and Electric Vehicles
Naotaka Kawamura (TOYOTA INDUSTRIES CORPORATION) Mitsuharu Muta* (TOYOTA INDUSTRIES CORPORATION)*
5. Energy Management and Hybrid Energy Storage in Metro Railcar
ISTVAN SZENASY DR* (SZECHENYI UNIV., D. AUTOMATION)*

Nov. 13, (Tue.) 14:00-16:05

SS-3: Power Electronics Applied to Renewable Energy and Energy Saving

Room: Sapphire

Organizer: Takaharu Takeshita (Nagoya Institute of Technology, Japan)

1. Detail Operating Characteristics of Bi-directional LLC Resonant Converter
Sihun Yang* (Kyushu University)* Seiya ABE (The International Centre for the Study of East Asian Development) Toshiyuki ZAITSU (Texas Instruments) Junichi Yamamoto (Texas Instruments Japan Ltd.) MASAHITO SHOYAMA (Kyushu University) Tamotsu Ninomiya (Nagasaki University)
2. PWM Strategy of Single-Phase to Three-Phase Matrix Converters for Minimizing Output Voltage Harmonics under Reducing Number of Switching
YUSUKE FURUHASHI* (Nagoya Institute of Technology)* Takaharu Takeshita (Nagoya Institute of Technology)
3. Dynamic Analysis Modeling for Reliability Increase of IPM-type BLDCM and Energy Saving under Dynamic Eccentricity—Stator Inter-turn Fault Coupling
Jun-Kyu Park* (University of Ulsan)* Kyung-Tae Kim (University of Ulsan) Sang-Hoon Cha (University of Ulsan) Byeong-Woo Kim (University of Ulsan) Jin Hur (University of Ulsan)
4. Power management unit for dc feeder in house (dc smart house)
Noriyuki KIMURA* (Osaka Institute of Technology)* Toshimitsu MORIZANE (Osaka Institute of Technology) Hideki OMORI (Osaka Institute of Technology)
5. A Maximum Power Control Scheme based on Multi-Agent System for Distributed Flexible Network Photovoltaic System
Sangsoo Park* (Osaka University)* Yushi Miura (Osaka University) Toshifumi Ise (Osaka University)

Nov. 13, (Tue.) 16:30-18:10

SS-4: New Trends in Solar Energy

Room: Sapphire

Organizers: V. Fernão Pires (EST Setubal/IPS, Portugal), Duarte M. Sousa (IST/UTL, Portugal), and J. F. Martins (FCT/UNL, Portugal)

1. Dye-sensitized solar cells using an anion-conducting polymer as a material of solid-state electrolyte
Yuki Ota* (Nagasaki University)* Takeo Hyodo (Nagasaki University) Yasuhiro Shimizu (Nagasaki University) Hiroyuki Yanagi (Tokuyama Corporation)
2. Optimal Tilt Angle for PV Modules Considering the Uncertainty of Temperature and Solar Radiation
Ying-Pin Chang* (Nan Kai University of Technolo)* Lieh-Dai Yang (Department of Industrial Engineering & Management, Nan Kai University of Technol)
3. Computational Application to Study the Performance of an Electric Vehicle with Photovoltaic Panels
Antonio Roque* (IST and CIEEEE/TU Lisbon)* Catarina Dinis (Instituto Superior Tecnico/TU Lisbon) Duarte M. Sousa (IST/UTL) V. Fernao Pires (ESTSetubal/IPS)
4. Photovoltaic Electric Vehicle Chargers as a Support for Reactive Power Compensation
V. Fernao Pires* (ESTSetubal/IPS)* Antonio Roque (IST and CIEEEE/TU Lisbon) Duarte M. Sousa (IST/UTL) Gil Marques (IST/UTL)