

EVER'10 Final Program

Thursday, March 25, 2010

Welcome Speech and Plenary Session 1
09H00 - 10H00, Amphitheater Camille Blanc

Chairs: Ahmed Masmoudi (Tunisia) and Raoul Viora (Monaco)

EVER10-PS1 *Influence on Electric Vehicle Trend on New Electromechanical Components Development*

Grzegorz Ombach

Brose Fahrzeugteile GmbH & Co., Germany

10H00 - 10H30: Coffee Break

RE1: Special Session on Grid System Technology
10H30 – 12H30, Amphitheater Camille Blanc

Chairs: Nobumasa Matsui (Japan) and Yasuyuki Nishida (Japan)

EVER10-329 *Charging of Electric Vehicles and Impact on the Grid: A Case Study*

P. Bauer, Yi Zhou, J. Doppler, and N. Stemberger

Delft University of Technology, The Netherlands

Hideki Hashimoto

The University of Tokyo, Japan

EVER10-330 *A New Approach of Model Based Grid Control Using Power Turbine Generator on Ship-board*

Nobumasa Matsui and Fujio Kurokawa

Nagasaki University, Japan

EVER10-331 *A New Digital Control Circuit for Green Switching Power Supply*

Fujio Kurokawa and Yuki Maeda

Nagasaki University, Japan

Tsukasa Takahashi, Kouta Bansho, Toru Tanaka, and Keiichi Hirose

NTT Facilities, Inc., Japan

EVER10-332 *A Novel Data Acquisition System for Monitoring Hybrid Energy Systems*

Ilhami Colak, Mehmet Demirtas, and Ramazan Bayindir

Gazi University, Turkey

EVER10-333 *An Easy Method to Decrease Input Current Harmonics of Three-Phase Diode Rectifier by Means of Pulse-Doubler Auxiliary Circuit*

Yasuyuki Nishida
Chiba Institute of Technology, Japan

EVER10-334 *A Three Level Inverter for Grid Connected Renewable Energy Systems*

Ibrahim Sefa, Necmi Altin, and Saban Ozdemir
Gazi University, Turkey

EV1: Lecture Session on Electric Machine Diagnosis
10H30 – 12H00, Auric 4

Chairs: Ion Boldea (Romania) and Ahmed Masmoudi (Tunisia)

EVER10-289 *Rotor Faults Detection of Induction Generator Integrated in Wind Power System*

Youcef Soufi
University of of Tebessa, Algeria

Tahar Bahi, Mohamed Faouzi Harkat, and Issam Atoui
University of Annaba, Algeria

EVER10-298 *Broken Rotor Symptoms in the Sensorless Control of Induction Machine*

Piotr Kolodziejek and Elzbieta Bogalecka
Gdansk University of Technology, Poland

EVER10-301 *Detection of Position Sensor Default on a Railway Traction PMSM Drive Using Multiresolution Analysis*

Houda Ben Attia Sethom and Manef Bourogaoui
University of Tunis El Manar, Tunisia

EVER10-302 *Diagnosis of Open Circuit Fault in PWM Inverter Fed Induction Motor*

Youcef Soufi
University of Tebessa, Algeria

Tahar Bahi, Mohamed Faouzi Harkat, and Hichem Merabet
University of Annaba, Algeria

EVER10-303 *Modeling and Detection of Eccentricity and Demagnetization Faults in Brushless Permanent Magnet DC Motors by Vibroacoustic Behavior*

A. Rezig and M. R. Mekideche
Jijel University, Algeria

A. Djerdir, A. Bouchrit, and A. Miraoui
University of Technology Belfort-Montbéliard, France

RE2: Lecture Session on Photovoltaic Systems

10H30 – 12H00, Auric 5

Chairs: Brayima Dakyo (France) and Costin Cepisca (Romania)

EVER10-223 *A Numerically Controlled Test Bench for PV Cell Characteristic Analysis*

Hocine Belmili and Ahmed Chikouche
Unit of Development of Solar Equipments, Algeria

Mourad Haddadi and Salah Mohamed Aitcheikh
Polytechnic National School, Algeria

EVER10-249 *Data Acquisition and Monitoring System for Photovoltaic Power Station*

Valentin Dogaru Ulieru
Valahia University, Targoviste, Romania

Costin Cepisca, Cornelia Cepisca, Sorin Dan Grigorescu, and Mircea Covrig
Politehnica University, Bucharest, Romania

Nicolae Jula
Military Technical Academy, Bucharest, Romania

EVER10-278 *Power Optimization of an Islanded Medium Power Photovoltaic System: Real Time Control of the Battery State*

Oumar BA and Pape Alioune Ndiaye
University Cheikh Anta Diop, Senegal

Daniel Depernet and Alain Berthon
University of Franche-Comte, France

EVER10-293 *Investigation of DC Distribution by Measuring and Modelling Power Supply Devices for Buildings with PV Production*

Cédric Jaouen
Institut National de l'Energie Solaire (CEA-INES) and SATIE, ENS Cachan Bretagne, France

Franck Barruel
Institut National de l'Energie Solaire (CEA-INES), France

Bernard Multon
SATIE, ENS Cachan Bretagne, France

EVER10-328 *Data Acquisition System for Photovoltaic Water Pumping System in the Desert of Tunisia*

Ammar Mahjoubi, Ridha Fethi Mechlouch, and Ammar Ben Brahim
University of Gabes, Tunisia

12H00 – 13H30: Lunch

EV2: Oral Session on Reluctance Motors

13H30 – 15H00, Auric 4

Chairs: Deliang Liang (China) and Ion Boldea (Romania)

EVER10-247 *Particle-Swarm-Optimized Design of a Three-Phase Full-Bridge Inverter-Fed Switched Reluctance Motor*

Dan Ilea and Mircea M. Radulescu
Technical University of Cluj-Napoca, Romania

Frédéric Gillon and Pascal Brochet
Ecole Centrale de Lille, France

EVER10-272 *Modeling, Analysis and Experiment of a Dual-Channel Switched Reluctance Machine for EV Application*

Wen Ding and Deliang Liang
Xi'an Jiaotong University, China

EVER10-274 *Modeling of a Linear Switched Reluctance Machine with Mutual Coupling for Wave Energy Conversion Including Magnetic Saturation and End Effects*

Jinhua Du
Ohio State University, USA

Deliang Liang and Qingfu Li
Xi'an Jiaotong University, China

EVER10-277 *Simulation of Switched Reluctance Machine with RT-LAB Simulator*

Hao Chen and Bingqiang Xia
China University of Mining & Technology, China

RE3: Oral Session on Solar Energy Technology

13H30 – 15H00, Auric 5

Chairs: Costin Cepisca (Romania) and Sonalee Henriette (USA)

EVER10-250 *Replacement of Solar Cells Conventional Silicon Support with Unconventional Supports*

Mariana Buga and Costin Cepisca
Bucharest Politehnica University, Romania

EVER10-251 *Performance of Parabolic Trough Collector Power Plant*

M.L. Yousfi, A. Chikouche, S. Elemtenani, and F. Haddad
Unit for Development of Solar Equipment, Algeria

EVER10-261 *Comparative Analysis of New Bi-Axial Solar Tracking Systems*

Maria Monica Vatasescu, Ion Visa, Anca Duta, Dorin Valentin Diaconescu, Ioana Sinziana Hermenean, and Daniel Tohoneyanu
Transilvania University Brasov, Romania

EVER10-262 *Modelling and Optimization of a Concentrated Hybrid Photovoltaic System with Pseudo-Equatorial Tracking*

Ioana Sinziana Hermenean, Ion Visa, Anca Duta, and Dorin Valentin Diaconescu
Transilvania University Brasov, Romania

Official Plenary Session in Presence of H.S.H. Prince Albert II
15H00 - 16H00, Amphitheater Camille Blanc

EVER10-OPS1

Speaker: Anthony Bernbaum
Global Head of Global Special Opportunities HSBC Bank, Europe

EVER10-OPS2

Speaker: Jeffrey Sachs
Director of Earth Institute at the Columbia University, USA

EVER10-OPS3

Speaker: Tom Smith
Nissan LEAF Chief Marketing Executive, Europe

Allocution of HSH Prince Albert II

16H00 –16H30: Exhibition Visit in Presence of H.S.H. Prince Albert II

***EV3: Special Session on Motor Drives Dedicated to Electric Vehicles
16H30 – 18H30, Amphitheater Camille Blanc***

Chairs: Luigi Alberti (Italy) and Grzegorz Ombach (Germany)

EVER10-300 *Overview and Comparison of Iron Loss Models for Electrical Machines*

Andreas Krings and Juliette Soulard
KTH Royal Institute of Technology, Sweden

EVER10-340 *High Power Electric Drives for All-Electric Ships*

Simone Castellan
University of Trieste, Italy
Alberto Tessarolo
University of Trieste, Italy

EVER10-341 *Preliminary Design of Parallel Hybrid Drive Trains by Dint of Scalable Electrical Machine Simulation*

Dominik Buecherl
Technische Universitaet Muenchen, Munich, Germany
Hans-Georg Herzog
Technische Universitaet Muenchen, Munich, Germany

EVER10-343 *An Approach to Assess Eddy-Current Losses in Concentrated Winding PM Machines*

Asma Masmoudi and Ahmed Masmoudi
University of Sfax, Tunisia

EVER10-344 *Robust Control Schemes for Induction Motor Drives for Electric Vehicle Applications*

Domenico Casadei, Michele Mengoni, Giovanni Serra, Claudio Rossi, Angelo Tani, and Luca Zarri
University of Bologna, Italy

EVER10-345 *Finite Element Estimation of Induction Motor Parameters for Sensorless Applications*

Luigi Alberti and Nicola Bianchi
University of Padova, Italy
Samad Taghipour Boroujeni
Amirkabir University of Technology, Iran

EVER10-346 *The Copenhagen Wheel: an Innovative Electric Bicycle System that harnesses the power of Real-time Information and Crowd Sourcing*

Christine Outram, Carlo Ratti, and Assaf Biderman
Massachusetts Institute of Technology, USA

***RE4: Special Session on the Integration of Electric Vehicles in
Decentralized Energy Supply Systems***

16H30 – 18H15, Auric 4

Chairs: Constantinos Sourkounis (Germany) and Grzegorz Iwanski (Poland)

EVER10-342 *Electric Vehicles as Flexible Energy Storage Systems in Power Distribution Networks*

Loredana Carradore and Roberto Turri
University of Padova, Italy

Liana M. Cipcigan and Panagiotis Papadopoulos
Cardiff University, UK

EVER10-347 *Charging Capacities for Electric Vehicles in Urban Distribution Grids*

Constantinos Sourkounis and Alexander Broy
Ruhr-University Bochum, Germany

EVER10-348 *Dynamic Energy Storage for Smart Grids*

Frans Dijkhuizen, Willy Hermansson, Konstantinos Papastergiou, and Georgios Demetriades
ABB Corporate Research, Sweden

Rolf Grünbaum
ABB FACTS, Sweden

EVER10-349 *An Incentive-based Approach for the Distribution of Decentralized Power Generation and the Integration of Electric Vehicles*

Frederik Einwächter and Constantinos Sourkounis
Ruhr-University Bochum, Germany

EVER10-350 *Pollution of the Grid by High Power Charging of Electric Vehicles*

Constantinos Sourkounis and Bingchang Ni
Ruhr-University Bochum, Germany

EV4: Special Session on Green Marine Vehicles

16H30 – 18H00, Auric 5

Chairs: Robert Latorre (USA) and Kazuyuki Ouchi (Japan)

EVER10-335 *Concept Design for Motor Assisted Wind Driven Vessel with Hard Sail*

Kazuyuki Ouchi and Kiyoshi Uzawa
The University of Tokyo, Japan

EVER10-336 *Flettner Rotors Used as Auxiliary Propulsion for Ships*

Joel Knif
Helsinki University of Technology, Finland

EVER10-337 *Design and Discuss on a Wind and Solar-Powered Autonomous Surface Catamaran*

Zhang Yufang, Qian Peng, Yi Hong, and Li Yinghui
Shanghai Jiao Tong University, China

EVER10-352 *Development of Eco-Friendly Fishing Vessel*

Iryna Korol
A-VERT, USA

Robert Latorre
University of New Orleans, USA

18H30: Welcome Reception (Exhibition Entrance Hall)

Friday, March 26, 2010

Plenary Session

09H00 - 10H00, Amphitheater Camille Blanc

Chairs: Elena A. Lomonova (The Netherlands) and Jian-Xin Shen (China)

EVER10-PS2 *Electric Propulsion Systems on HEVs: Review and Perspective*

Ion Boldea

University Politehnica Timisoara, Romania

10H00 - 10H30: Coffee Break

REV1: Lecture Session on Marketing and National R&D Projects

10H30 – 12H30, Amphitheater Camille Blanc

Chairs: Markus Hüwener (Germany) and Christy Corl (USA)

EVER10-232 *Building a Better Business Case: the Use of Non-linear Growth Models for Predicting the Market for Hybrid Vehicles in the UK*

Girish Muraleedharakurup, Andrew Mc Gordon, John Poxon, and Paul Jennings
University of Warwick, UK

EVER10-254 *Educational Exploration of Partnerships through Studies in Geographic Well-Being*

Christy Corl

Portland State University, USA

EVER10-256 *Innovative Mechanisms to Finance Renewable Energy Projects*

Markus Hüwener

First Climate, Germany

EVER10-264 *Can Solar Generated Electricity Achieve Grid Parity With Current Fossil Fuel Based Electricity?*

Sonalee Henriette

GreenSPHERE Energy Inc, USA

EVER10-273 *Impact of Electric Vehicle Recharging on an Interconnected Island Power Grid: Case Study of Commuting in Corsica*

Camille Grosjean, Olivier Wiss, and Marion Perrin
National Institute of Solar Energy, France

Philippe Poggi

University of Corsica Pasquale Paoli, France

EVER10-304 *Analysis and Design Specification of a New Energy Efficient Urban Transport System Based on the Use of Electrical Vehicles Integrated in the Power Grid and Driven by High Renewable Energies Integration. Project EPV.*

Sixto Santonja Hernández, Patricio Peral Galindo, and Alfredo Quijano López
Energy Technological Institute, Spain

EVER10-311 *Drawbacks of Regulation to Promote Electric Vehicles*

Nuno Domingues
Instituto Superior de Engenharia de Lisboa, Portugal

Filipa Silva
Universidade Nova de Lisboa, Portugal

EVER10-316 *Selected Financial-Economic Aspects of R&D in Renewable Energy Conversion Technologies. The Case of University Spin-off Company*

Anna Adamowicz, Ewa Mazurek-Krasodomska, and Zbigniew Krzeminski
Gdansk University of Technology, Poland

Marek Adamowicz
Gdynia Maritime University, Poland

REV2: Lecture Session on Converters

10H30 – 12H30, Auric 4

Chairs: Jian-Xin Shen (China) and Ahmed Masmoudi (Tunisia)

EVER10-234 *A Novel Eight Switches Inverter Topology for Plug-In Hybrid Electric Vehicle*

Omar Hegazy and Joeri Van Mierlo
Vrije Universiteit Brussel, Belgium

EVER10-271 *A New SVPWM Strategy Dedicated for the Control of Delta Inverters*

Bassem El Badsı
University of Sfax, Tunisia

EVER10-279 *Design and Control of a DC-DC Soft Switching Power Converter for Renewable Energy Sources Applications*

Norbert Messi Bene Eloundou, Frédéric Gustin, and Alain Berthon
University of Franche-Comte, France

EVER10-295 *Three-Port Bi-directional Converter for Electric Vehicles: Focus on High-Frequency Coaxial Transformer*

Gierrı Waltrich, Jorge L. Duarte, Marcel A.M. Hendrix, and Johannes J.H. Paulides
Eindhoven University of Technology, The Netherlands

EVER10-315 *Unconstrained Fundamental Precalculated Harmonic Elimination Method for Three-Phase Static Inverter*

Omar Mansouri and Johan Gyselinck
Université Libre de Bruxelles, Belgium

Abderrezzak Cherifi
University of Versailles Saint-Quentin-en-Yvelines, France

EVER10-324 *Harmonics and Common-Mode Voltage in Transformerless AC Module Integrated in PV Systems*

Tarak Salmi and Ahmed Masmoudi
University of Sfax, Tunisia

Mounir Bouzguenda and Adel Gastli
Sultan Qaboos University, Sultanate of Oman

EV5: Lecture Session on Modelling

10H30 – 12H30, Auric 5

Chairs: Elena A. Lomonova (The Netherlands) and Luigi Alberti (Italia)

EVER10-227 *Design and Modeling of Magnetostriction Phenomena in Induction Machines*

Ammar Boulassel, Ali Rezig, Hichem Allag, and Mohamed Rachid Mekideche
University of Jijel, Algeria

EVER10-243 *Mathematical Modeling of Multipolar Double Fed Induction Generator with Two Phase Secondary Winding*

G. Dilevs and E. Jakobsons
Riga Technical University, Latvia

EVER10-253 *Vector Control Drive of Permanent Magnet Synchronous Motor Using Finite Element Environment*

Mohamed Hédi Gmiden and Hafedh Trabelsi
University of Sfax, Tunisia

EVER10-259 *Improvement of the Dynamic Modelling of Permanent Magnet Machines*

Zoubida Belli Boulassel, Ali Rezig, Nassira Ferkha, and Mohamed Rachid Mekideche
University of Jijel, Algeria

EVER10-275 *Finite Element Modeling Under Stress by the Nonlinearity of a Ferromagnetic Material*

M. Mohammedi
University of Skikda, Algeria

T. Bahi
University of Annaba, Algeria

Y. Soufi
University of Tebessa, Algeria

EVER10-309 *Ridge Polynomial Neural Networks for Inverse Problems in Electromagnetic Non-destructive Testing*

Tarik Hacib, Nassira Ferkha, and Mohamed Rachid Mekideche
University of Jijel, Algeria

Yann Le Bihan
University of Paris-Sud 11, France

EVER10-313 *Influence of Geometric Parameters upon Electromagnetic Performance and Vibratory Behavior of Permanent Magnet Machines*

Dimitri Torregrossa, François Peyraut, Abdesslem Djerdir, and Abdellatif Miraoui
University of Technology of Belfort-Montbéliard, France

Nassira Ferkha and Mohamed Rachid Mekideche
University of Jijel, Algeria

EVER10-366 *Reluctant Network Modelling of an Improved Electromagnetic Actuator Intended for ICE Applications*

Helmi Aloui
University of Sfax, Tunisia

Moufida klach
University of Gabes, Tunisia

EV6: Lecture Session on Electric and Hybrid Vehicles
10H30 – 12H30, Apollinaire

Chairs: Harald N. Røstvik (Norway) and Raoul Viora (Monaco)

EVER10-226 *The Butterfly and the Koenigsegg*

Harald N. Røstvik
Sivilarkitekt Harald N. Røstvik AS, Norway

EVER10-231 *BoostBus Concept Supercap Technology Could Provide the Key to the Mass Production of Truly Eco-friendly Buses for City Streets*

Fabrice Bugnon
Maxwell Technologies SA, Switzerland

EVER10-248 *Series Hybrid Plug-in Electric Vehicle, Using a Disk-Type Synchronous Machine and Special Controller*

Carlos Castillo, Juan Dixon, and Lorenzo Urrutia
Pontificia Universidad Católica, Chile

EVER10-280 *Design and Test of Pios Hydrogen Fuel Cell Motorcycle*

Joerg Weigl, Inayati, and Hamdani Saidi
Universiti Teknologi Malaysia, Malaysia

EVER10-282 *Simulation and Optimization of the Energy Management of ITAN500 in the SUMO Traffic Model Environment*

D. Pacella, T. Donateo, and D. Laforgia
Università del Salento, Italy

EVER10-285 *Analysis of Vehicle Range for Practical Plug-in Electric Vehicles in Japan*

Yuki Kudoh and Ryoko Motose
National Institute of Advanced Industrial Science and Technology, Japan

EVER10-292 *Equipment for Dynamic Testing of the Vehicle Electric Drives in Real Operating Conditions*

Stefan Gheorghe, Mircea Covrig, Grigore Danciu, Costin Cepisa, Sorin Grigorescu, Sanda Paturca, Viorel Mateescu, and Dorin Oprea
University Politehnica of Bucharest, Romania

EVER10-297 *Citroen Berlingo "Powered by Venturi" A Real Solution for Sustainable Mobility*

Nicolas Mauduit
Venturi Automobiles, Monaco

12H30 – 14H00: Lunch

EV7: Lecture Session on Batteries and Sustainable Fuels

14H00 – 16H00, Auric 4

Chairs: Malcolm Allan (UK) and Deliang Liang (China)

EVER10-228 *Scenario based Analysis of Load Demand due to EV Battery Charging in Distribution Systems*

Kejun Qian, Chengke Zhou, and Malcolm Allan
Glasgow Caledonian University, UK

Yue Yuan
Hohai University, China

EVER10-242 *Battery Cycle Life Associated Cost of Vehicle-to-grid*

Chengke Zhou, Kejun Qian, and Malcolm Allan
Glasgow Caledonian University, UK

EVER10-257 *The success and popularity of Flex Fuel in Brazil*

Jairo José Drummond Câmara, Rafael Augusto de Souza Floriano, Tatiana Marques Ribeiro, Luíza Tamburini Gomes, and Rober Dias Botelho
State University of Minas Gerais Design School, Brasil

EVER10-263 *Serial and Parallel Connection Influence on the Full Vehicle Shock Absorbers Energy Recovery System*

Horia Abaitancei, Vlad Constantin Serbanescu, Gheorghe-Alexandru Radu, and Sebastian Radu
Transilvania University Brasov, Romania

Petru Cristinel Irimia
LMS, Romania

EVER10-276 *3D Simulation and Analysis of Static and Dynamic Stray Capacitance for Planar Inductor with Matrix Windings Based on Energy*

Jianyong Lou, Deliang Liang, Yitong Chen, Lin Gao, and Fangjun Jiao
Xi'an Jiaotong University, China

EVER10-291 *Relations between Battery Suppliers and Automakers for Knowledge Base Development during Paradigmatic Shifts in Technology*

Hans Pohl
Chalmers University of Technology, Sweden

Masaru Yarime
University of Tokyo, Japan

EVER10-294 *The Ecological Side of Combustion Vehicle*

Jairo José Drummond Câmara, Ana Luiza Soares Pinto, Fabiana Bergamaschine Giovani, Fernando Henrique Cadamuro de Oliveira, Marina Almeida Barcellos, and Rodrigo Fernandes Nogueira
State University of Minas Gerais, Brasil

***EV8: Special Session on Safety and Risk Analysis of Transport Systems
14H00 – 16H00, Auric 5***

Chairs: Habib Hadj-Mabrouk (France) and Christy Corl (USA)

EVER10-354 *Supporting Tool of Regulation Capitalization and Exploitation in Railroad Safety*

Ahmed Bellaaj and Anas Kamoun

University of Sfax, Tunisia

Habib Hadj-Mabrouk

INRETS, France

EVER10-355 *System Based Knowledge for the Help in Exploitation of Field Data Feedback in Railroad Transport*

Ahmed Maalel, Lassâd Mejri, and Henda Ben Ghezela

University of Manouba, Tunisia

Habib Hadj-Mabrouk

INRETS, France

EVER10-356 *Taking into Account of Human Risk in Maritime Sector “Application on Sea Motorways Project”*

Amira El-Mabrouk and Anas Kamoun

University of Sfax, Tunisia

Habib Hadj-Mabrouk

INRETS, France

EVER10-357 *Taking into Account of Safety in Models of Railroad Traffic Management and Optimization*

Chokri Lajimi

University of Sousse, Tunisia

Habib Hadj-Mabrouk

INRETS, France

EVER10-358 *Towards an Ontology of Risks Analysis*

Feyrouz Hamdaoui and Anas Kamoun

University of Sfax, Tunisia

Habib Hadj-Mabrouk

INRETS, France

EVER10-359 *Methodological Approach of Management of the Risks in the Industrial Sector: Application to the Oil Sector*

Saoussen Bahri

University of Sousse, Tunisia

Habib Hadj-Mabrouk

INRETS, France

RE5: Lecture Session on Renewable Energies and Applications
14H00 – 16H00, Apollinaire

Chairs: Brayima Dakyo (France) and Grzegorz Iwanski (Poland)

EVER10-236 *Technico-economic viability of Photovoltaic Powered Water Pumping systems in Sahelian area*

Innocent Compaoré, Jacques Raharijaona, and Brayima Dakyo
University of Le Havre, France

Yézouma Coulibaly
International Institute for Water and Environmental Engineering
Burkina Faso

EVER10-270 *Modeling of the Interferences Caused by Wind Farms over the TV Broadcast Service*

C. C. Alejandro, C. R. Miguel, and Leandro de Haro y Ariet
Universidad Politécnica de Madrid, Spain

Pedro Blanco-González
Iberdrola S.A, Spain

EVER10-325 *Performance Evaluation and Quality Impact of 4 kWp Photovoltaic System on the Public Distribution Low Voltage Network at KNUST-Kumasi/Ghana*

Ahmed Ousmane Bagré
International Institute for Water and Environmental Engineering, Burkina Faso

Dr David Anipa
Kwame Nkrumah University of Science and Technology, Ghana

EVER10-326 *DC Voltage Based Control of Grid-Connected Photovoltaic/Wind Energy System*

Mamadou Lamine Doumbia, and Kodjo Agbossou
Université du Québec à Trois-Rivières, Canada

EVER10-327 *Simplified Model of a Fuel Cell for Microgrids Applications*

A. Etxeberria and I. Vechiu
ESTIA-Recherche, France

H. Camblong
UPV/EHU, Spain

A. Arnedo and L. Romero
Foundation for the Development of New Hydrogen Technologies in Aragon, Spain

EVER10-265 *Ultracapacitor Integration for Short-term Energy Management in a Hybrid System*

M. A. Tankari, M.B.Camara, B. Dakyo, and C. Nichita
University of Le Havre, France

16H00 - 16H30: Coffee Break

EV9: Special Session on Machine Design and Optimization

16H30 – 18H30, Auric 4

Chairs: Grzegorz Ombach (Germany) and Luigi Alberti (Italia)

EVER10-267 *Design Rules for Energy Efficient IPM Motors in HEV Applications*

Thomas Finken, Martin Hafner, Matthias Felden, and Kay Hameyer
RWTH Aachen University, Germany

EVER10-268 *Design Issues of an IPM BLAC Motor Used for Electric Power Steering*

Canfei Wang, Jianxin Shen, and Mengjia Jin
Zhejiang University, China

Patrick Chi-Kwong Luk and Weizhong Fei
Cranfield University, United Kingdom

EVER10-269 *Axial-Flux Permanent-Magnet Synchronous Motor Intended for Traction Application: a Comparison between Two Topologies*

Nadia Chaker, Helmi Aloui, and Rafik Néji
University of Sfax, Tunisia

EVER10-284 *Fast Torque Estimation of In-Wheel Parallel Flux Switching Machines for Hybrid Trucks*

E. Ilhan, J.J.H. Paulides, and E.A. Lomonova
Eindhoven University of Technology, The Netherlands

EVER10-286 *Comparison of PM Brushless Motors for Automated Manual Transmission Systems with Different on-Board Voltage Levels*

Jacek Junak and Grzegorz Ombach
Brose Fahrzeugteile GmbH & Co., Germany

EVER10-290 *Analysis and Optimization of Drive System Used in Electric Bike*

Wojciech Chlebosz, Grzegorz Ombach, and Jacek Junak
Brose Fahrzeugteile GmbH & Co., Germany

EVER10-307 *Investigation of Winding Topologies for Permanent Magnet In-Wheel Motors*

Yang Tang, Johannes J.H. Paulides, Evgeny Kazmin, and Elena A. Lomonova
Eindhoven University of Technology, The Netherlands

RE6: Special Session on Interfacing Renewable Energies to the Grid
16H30 – 18H30, Auric 5

Chairs: Grzegorz Iwanski (Poland) and Constantinos Sourkounis (Germany)

EVER10-246 *Voltage and Frequency Regulation in an Isolated Power Network Supplied with Wind Energy*

Imad Mougharbel
Lebanese University, Lebanon

Philippe Assaf and Hadi Kanaan
St Joseph University, Lebanon

Semaan Georges
Notre Dame University, Lebanon

EVER10-288 *The Control of Rotor Side and Grid Side Converters in a DFIG during Network Voltage Unbalance Conditions Using Resonant Current Controllers*

Joe Kearney, Michael Conlon, and Eugene Coyle
Dublin Institute of Technology, Ireland

EVER10-316 *Selected Financial-Economic Aspects of R&D in Renewable Energy Conversion Technologies. The Case of University Spin-off Company*

Anna Adamowicz, Ewa Mazurek-Krasodomska, and Zbigniew Krzeminski
Gdansk University of Technology, Poland

Marek Adamowicz
Gdynia Maritime University, Poland

EVER10-317 *Cascaded Quasi-Z-Source Inverters for Renewable Energy Generation Systems*

Marek Adamowicz and Ryszard Strzelecki
Gdynia Maritime University, Poland

Dmitri Vinnikov
Tallinn University of Technology, Estonia

EVER10-321 *Design and Analysis of Axial-Flux Coreless Permanent Magnet Disk Generator*

Lukasz Drazikowski and Wlodzimierz Koczara
Warsaw University of Technology, Poland

EVER10-322 *Control of VSC Connected to Unbalanced Grid*

Lukasz Drazikowski and Grzegorz Iwanski
Warsaw University of Technology, Poland

EVER10-323 *Modeling and Laboratory Research of Brushless DFIG*

Grzegorz Iwanski
Warsaw University of Technology, Poland

Gonzalo Abad
Mondragon University, Spain

EVER10-361 *Investigation of the Effect of the Rotor-Phase Sequence Connection on the BCDFM Stability: Application to Wind Power Generation*

Faiçal Jallali and Ahmed Masmoudi
University of Sfax, Tunisia

EV10: Lecture Session on Machine Control

16H30 – 18H30, Apollinaire

Chairs: Ion Boldea (Romania) and Chen Hao (China)

EVER10-202 *On the Comparison of the Performance of Different DTC Strategies with Fixed Commutation Frequency*

Fatma Ben Salem and Ahmed Masmoudi
University of Sfax, Tunisia

EVER10-204 *On the Development of a Test Bench Dedicated for the Investigation of the Features of a Delta-inverter Fed BDCM Drive*

Améni Driss, Asma Ben Rhouma, Bassem El Badsì, Abdessettar Guermazi, and Ahmed Masmoudi
University of Sfax, Tunisia

EVER10-238 *Potentialities of DTC Strategies in Position Regulation: Application to Robotics*

Badii Bouzidi, Abderrazak Yanguì, and Ahmed Masmoudi
University of Sfax, Tunisia

EVER10-360 *Induction Motor Drive under Nonlinear Backstepping Control Using DSpace DS1104 Control Board*

Ramzi Trabelsi, Mohamed F. Mimouni, and Faouzi Msahli
University of Monastir, Tunisia

Adel Khedher
University of Sousse, Tunisia

Ahmed Masmoudi
University of Sfax, Tunisia

EVER10-237 *PID- Sliding Mode and Lyapunov Design Controllers for Power Optimization of Variable Speed Wind Turbines*

Subramanian Poothamkurissi Swaminathan, Boubekeur Boukhezzar, and Houria Siguerdidjane
Ecole Supérieure d'Electricité (SUPELEC), France

EVER10-239 *On Line Efficiency Improvement of Induction Motor Vector Control Using Real Coded Genetic Algorithms*

Z. Rouabah and B. Abdelhadi
Batna University, Algeria

F. Anayi
Cardiff University, UK

EVER10-244 *A New Field Oriented Control Technique of EPS Motor with Low-Cost Current Sampling*

J. M. Liu, J. X. Shen, M. J. Jin, W. Z. Fei, and H. Hao
Zhejiang University, China

EVER10-245 *Sensorless Operation of High-Speed PM BLDC Machine Using Full Hardware Rotor-Flux-Observer*

H. Hao, M. J. Jin, J. X. Shen, and W. Z. Fei
Zhejiang University, China

20H30: Official Dinner (Hotel Fairmont Monte-Carlo)