

Oral Sessions

10 minutes for presentation and 5 minutes for discussion per group

Place: **Pontoppidanstræde 105 room 4.127**

Date: **17 December 2015**

Conference Chair: **Ewen Ritchie**

Co-Chairs: **Tamas Kerekes, Lasse Rosendahl, Henrik Sørensen, Huai Wang, Michael Møller Bech**

07:45 – 08:15	Coffee in the hall outside room 4.127
	Conference Opening
08:15 – 08:45	Keynote Speech by Prof. Frede Blaabjerg: Energy Saving and Efficient Energy Use by Power Electronic Systems
	Session 1: Wind Energy Session Chairman: Tamas Kerekes
08:45 – 09:00	Investigation of Change of Aerodynamic Properties of a Wing Section Covered by Ice <i>Nicolai Tang, Nick Høy Hansen, Camilla Nødbak Gade and Stephanie Sigvert Sørensen</i>
09:00 – 09:15	Control of a Hydraulically Actuated Wind Load Simulator <i>Kris Riisager, Viktor Donkov and Søren Fog Dissing Zeilmann</i>
09:15 – 09:30	Control and Allocation of Flexible Loads in Distribution Networks <i>Foo Yi Wern, Umur Uslu, Boyang Zhang</i>
09:30 – 09:50	Coffee break
	Session 2: Terrestrial energy systems
	Session Chairman: Lasse Rosendahl
09:50 – 10:05	Modelling and Simulation of a Concrete Thermal Energy Storage System <i>Nicklas Overgaard Andersen</i>
10:05 – 10:20	Investigation of Spent Mushroom Compost as an Alternative Waste-Based Feedstock for Carbon Recovery Enhanced Hydrothermal Liquefaction <i>Lukas Jasiunas</i>
10:20 – 10:35	Analysis of Catalysts in a HTL Process: a Study about the Driving Force in the Catalytic Effect <i>Luca Casamassima, Thomas Helemer Pedersen, and Lasse A. Rosendahl</i>
10:35 – 10:50	Sizing of Renewable Energy Sources for Autonomous Residential Microgrid <i>Nicolae Badulescu, Enrique Rodríguez-Díaz, Juan C. Vásquez</i>

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11:50 – 11:05 **Water Level Control in a Three-Phase Separator**
Jacob Glæsner, Randy Oldenbürger, Stefan Jespersen

11:05 – 11:15 **Coffee break**

Session 3: Fluid Mechanics
Session Chairman: Lasse Rosendahl

11:15 – 11:30 **Measurement and Simulation of Flow Conditioning Efficiency for a Perforated Plate**
Kristian Kristensen, Lasse Brams Vinther and Søren Søndergaard Batz

11:30 – 11:45 **90 Duct Elbow a Mind-BENDING Investigation**
Lea Bandholtz Jørgensen, Lotte Strange Kjær and Mathias Poulsen*

11:45 – 12:00 **Valve Flow Analysis Using CFD**
Christian L. Lambertsen, Rune W. Johannsen

12:00 – 13:00 **Lunch and Poster Session in room 3.115**

Session 4: Electrical Engineering

Session Chairman: Huai Wang

13:00 – 13:15 **A Gate Driver Design with High Common Mode Rejection for 10 kV SiC MOSFET Inverter**
Nicklas Christensen, Dipen Narendra Dalal

13:15 – 13:30 **Parameter Identification method for PM machines 'while running'**
Anamaria Florina Gavriluta, Ionut Vernica

13:30 – 13:45 **Control of A Grid Connected Converter During Weak Grid Conditions**
Alex Buus Nielsen, Søren Lund Lorenzen, Massoud Ashkzari

13:45 – 14:00 **Modelling and Control of a 1 kW PMSM**
Ole Damm Kristensen, Claudiu Ionita, Malte Tobias Thomez, Maciej Porebski

14:00 – 14:30 **Coffee in the hall outside room 4.127**

Session 5: Control Engineering

Session Chairman: Michael Møller Bech

14:30 – 14:45 **Design and Evaluation of a SMISMO Control Strategy for a Hydraulic Differential Cylinder**
Johan H. Ehlern, Peter JunkerN, Kasper G.B Nielsen and Søren Ketelsen

14:45 – 15:00 **Trajectory Control for Hydraulic Robot**
Torben Ejnar Løvbjerg Jørgensen, ,Nicklas Koldkjær Jensen, Mathias Galberg

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15:00 – 15:15	Control of Hydraulic Wave Simulator System <i>Niels Pedersen, Magnus F. Asmussen, Stefan M. Jørgensen, Nikolaj S. Høyer</i>
15:15 – 15:30	SMISMO Based Control of a Hydraulic Actuator <i>Tom-Erik Lindberg, Esben L. Madsen, Janus M. T. Jørgensen and Morten L. Winther</i>
15:30 – 15:45	Investigation Of SMISMO Control Strategies Using Digital Hydraulic Valves <i>Nicolaj Winther Johansen, Henrik Haugey, Nicolai Daugbjergz and Rasmus Kinch</i>
16:00 – 16:30	Award Ceremony
16:30	Conference Closure

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