

The Energy Sponsor Programme

The Annual Energy Seminar 2011

December 14th 2011, 9.00 am – 17.15 pm

Plenum – Research Trends
Fibigerstræde 16, room 1.108

09.00 - 09.10	Welcome by Professor Lasse Rosendahl, Dept. of Energy Technology, AAU
09.10 - 09.55	Energy Technology – Danish Challenges in a Global Context by Chief Advisor Povl Frich, Danish Energy Agency
09.55 - 10.40	Smart Grids by Dr. Paulo Ribeiro, Eindhoven University of Technology
10.40 - 11.00	Break
11.00 - 11.45	Towards the Low Carbon Energy System by Jørgen Kjems, Senior Research Advisor
11.45 - 12.30	Lunch

Parallel 1 – Research Activities at the Dept. of Energy Technology
Fibigerstræde 16, room 1.108

12.30 – 12.45	Intelligent Lightning Use of LED Technology by Associate Professor Stig Munk-Nielsen
12.45 – 13.00	Green Thinking in Particle Accelerators – Green Magnets by Industrial PhD Student Rasmus Ørndrup Nielsen
13.00 – 13.15	Undergrounding Denmark: Plans and Challenges by Assistant Professor Filipe Faria da Silva
13.15 – 13.30	Harmonics in Large Offshore Wind Farms by PhD Student Lukasz Kocewiak
13.30 – 13.45	Magnetic Gear with Integrated Motor – Future Traction Systems in Electric Cars by Associate Professor Peter Omand Rasmussen
13.45 – 14.00	Sensorless Control of IPM Machines by Assistant Professor Torben N. Matzen
14.00 – 14.30	Break
14.30 – 14.45	Optimal Operation of Electric Vehicles in Competitive Electricity Markets and Its Impact on Distribution Power Systems by PhD Student Weihao Hu
14.45 – 15.00	EV Impacts on LV Residential Grids by Assistant Professor Jayakrishnan Pillai
15.00 – 15.15	12 Bus Grid Benchmark for Wind Integration Study by PhD Student Müfit Altin
15.15 – 15.30	Spinning Reserve Determination in a Power System with Significant Wind Power Generation by Assistant Professor Peiyuan Chen

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Parallel 2 – Research Activities at the Dept. of Energy Technology
Fibigerstræde 16, room 1.101

12.30 – 12.45	A Recent Break-Through in the Understanding and Resolution of Water Management Problems in LTPEM Fuel Cells by Associate Professor Torsten Berning
12.45 – 13.00	A Novel Method for Estimation of Membrane Hydration Status for Standby Proton Exchange Membrane Fuel Cell Systems by Impedance Measurement by Assistant Professor Benoit Bidoggia
13.00 – 13.15	Green Oil by Professor Lasse Rosendahl
13.15 – 13.30	Design and Optimization of a Bio-oil Upgrading Process by PhD Student Jessica Hoffmann
13.30 – 13.45	Oxide Thermoelectrics for Effective Power Generation Waste Heat (OTE-POWER) by Programme Leader Paw V. Mortensen
13.45 – 14.00	TEG-Brake Pad by Professor Lasse Rosendahl
14.00 – 14.30	Break
14.30 – 14.45	Smart Photovoltaic Systems by Tamas Kerekes
14.45 – 15.00	Microgrids by Professor Josep M. Guerrero
15.00 – 15.15	Optimization of Renewable Energy Systems for residential ZEBs by PhD Student Christian Milan
15.15 – 15.30	Design of High Efficiency Digital Displacement Pump by PhD Student Daniel Rømer and Per Johansen

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15.30 – 15.45	Closing remarks and wrap up
15.45 – 16.15	Tour in the laboratories of the Department
16.15 – 17.15	Reception and networking