



**WORKSHOP**

**ACTIVE POWER DISTRIBUTION GRIDS: APPLICATIONS, TOPOLOGIES AND CONTROL**

Wednesday, 03.10.2012

Tallinn University of Technology, Faculty of Power Engineering

Room: VII-430

CHAIRS: Dr. João Martins (Universidade Nova de Lisboa, Portugal)  
Prof. Ryszard Strzelecki (Gdynia Maritime University, Poland)

9:00 – 9:15	Formal opening. Smart Grid Technology: Last Developments in TUT	Prof. Tõnu Lehtla (TUT, Estonia)
9:15 – 9:30	Intelligent Transformers as Energy Routers of Active Power Distribution Grids	Dr. Indrek Roasto (TUT, Estonia)
9:30 – 9:45	Power Electronics in Active Power Distribution Grids	Prof. Ryszard Strzelecki (Gdynia Maritime University, Poland)
9:45 – 10:00	Communication Issues of Active Power Distribution Networks	Dr. João Martins (Universidade Nova de Lisboa, Portugal)
10:00 – 10:15	Electric Vehicle as a Component of a Smart Grid	Dr. Tanel Jalakas (TUT, Estonia)
10:15 – 10:30	Review of Communication Interfaces for Battery Cell Monitoring	Prof. Ilya Galkin (RTU, Latvia)
10:30 – 10:45	Overview of New Energy Management System of the Dept. of Electrical Drives and Power Electronics	Dr. Argo Rosin (TUT, Estonia)
10:45 – 11:00	Visit to the Energy Management Lab of TUT	Dr. Argo Rosin and Dr. Tanel Jalakas (TUT, Estonia)
<b>11:00 – 11:15</b>	<b>Coffee Break</b>	
11:15 – 11:30	qZS-based Resonant DC/DC Converter for FC Powered Applications	Dr. Janis Zakis (TUT, Estonia)
11:30 – 11:45	qZS-Derived Push-Pull DC/DC Converter for Small- and Medium-Scale PMSG Based Wind Turbines	Dr. Andrei Blinov (TUT, Estonia)
11:45 – 12:00	New Three-Level Buck-Boost NPC Inverter for PV Applications	Dr. Oleksandr Husev (TUT, Estonia)
12:00 – 12:15	New DC/DC Converter for Electrolyser Interfacing with Stand-Alone Renewable Energy System	M. Sc. Anna Andrijanovits (TUT, Estonia)
12:15 – 12:30	qZS-Based Dual-Active-Bridge as Alternative Topology for Isolation Stage of Intelligent Transformers	M. Sc. Viktor Beldjajev (TUT, Estonia)
12:30 – 12:45	Comparative Study of Power Balance Keeping Approaches in Smart Nano-Grids	M. Sc. Alexander Suzdalenko (RTU, Latvia/ TUT, Estonia)

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