



# 5th International Conference

# Power Engineering, Energy and Electrical Drives



Riga, Latvia

May 11-13, 2015

#### O http://www.powereng2015.org/

#### **General Chairs**

- Ilya Galkin
- Riga Technical University (Latvia) Dmitri Vinnikov Tallinn University of Technology (Estonia)
- **Honorary Chairs**
- Leopoldo García Franquelo University of Seville (Spain)
- Leonīds Ribickis
   Riga Technical University (Latvia)

## Organization Committee

- Ansis Avotiņš
- Riga Technical University (Latvia) • Taavi Möller
- Tallinn University of Technology (Estonia)
- Aija Laicāne
- Riga Technical University (Latvia) • Jānis Zaķis
- *Riga Technical University (Latvia)* • Aleksandrs SuzdaJenko
- Riga Technical University (Latvia) Ingars Steiks
- *Riga Technical University (Latvia)* • Anastasija Zhiravetska
- Riga Technical University (Latvia)

#### O Deadlines • 23/01/2015

- Full paper submission for review. 23/02/2015
- Author's notification.
- 6/03/2015
   Early registration.
- 13/03/2015 Final upload.

#### **O** General contacts

## **POWERENG'2015 Office**

Ansis Avotins / Aija Laicane Riga Technical University Azenes iela 12/1 LV-1048 Riga (Latvia) Phone: +371 6 708 9917 GSM: +371 2 615 2357 FAX: +371 6 708 9941 powereng2015@rtu.lv



Call

**Riga Technical University** Tallinn, Estonia

for papers



TALLINNA TEHNIKAÜLIKOOL TALLINN UNIVERSITY OF TECHNOLOGY

Tallinn University of Technology Tallinn, Estonia

## **O** Invitation

Welcome to the upcoming international conference POWERENG'2015. The aim of this event is to bring together researchers, engineers and practitioners from all over the world, interested in the advances of power systems (energy and electrical drives). Six simultaneous tracks will be held.

The conference will be held in Riga, the capital of Latvia which was also European Capital of Culture in 2014. Riga, with a population of about seven hundred thousand inhabitants, is a modern city, which has a lot to offer both in terms of history, culture and social life. We are aiming to make this event scientifically fruitful and socially saturated.

#### **O** Topics

• CT1: Power Generation, Transmission and Distribution

Modelling; Forecasting and Management; Power Quality and Grounding; Safety, Maintenance and Operation; Distribution System Planning and Reliability; Flexible AC Transmission Systems).

#### • CT2: Power Electronics, Systems and Applications

(Soft switching converters; Multilevel converters; Matrix converters; Emerging topologies; Power Converters Modelling, Simulation and Control; Power Factor Correctors; EMI and over-voltage protection; Active Filters and Harmonics; Power Supplies; Power Electronics Components and Packaging; Reliability and Fault Tolerance).

#### CT3: Smartgrid Technologies & Applications

(Smart grid for distributed energy resources; Smart grid for energy savings and financial management; Smart grid in interdependent energy infrastructures; Smart grid for intelligent monitoring and outage management; Smart grid for energy management in buildings and home automation; Phasor measurement unit applications for smart grid; Smart grid for plug-in vehicles and low-carbon transportation alternatives)

#### O CT4: Electrical Machines and Adjustable Speed Drives

(AC and DC Machines and Drives; Reluctance machines and drives; Permanent magnet machines and drives; Linear machines and drives; Sensorless control; Piezo and electrostatic actuators; Maintenance and Fault Diagnosis; Electrical Vehicles; EMC related phenomena)

#### **O** CT5: Renewable Energy Sources and Technology

(Energy Management; Hybrid Power Systems; Distributed and Co-Generation Systems; Wind Energy Systems; Marine Renewable Energy; Biomass Energy and Geothermal Resources; Solar Energy Systems; Hydro Power Plants; Hydrogen Systems and Fuel Cells)

#### CT6: Education in Power and Electrical Engineering

(Education methodology; Simulation software and tools; Distance education).

The above listed topics do not exclude submission and presentation of papers from other specific fields related to the general theme of the Workshop-Conference.

#### **O** Participation Fee

The registration fee includes the Workshop-Conference Proceedings CD-Rom, the three day lunches and coffee breaks, the welcome party and the gala dinner, are eligible for a ONE paper upload.

	Before 06/03/2015	Aftter 06/03/2015	On site	
Non IEEE Members	540 EUR	590 EUR	640 EUR	
IEEE Members*	490 EUR	540 EUR	590 EUR	
IES Members*	440 EUR	490 EUR	540 EUR	
Student (not authors)	200 EUR	300 EUR	540 EUR	
*IEEE and IEEE-IES Members must indicate their member number within registration process. Student must				

\*IEEE and IEEE-IES Members must indicate their member number within registration process. Student must send a document from their universities that acreditates their student condition.

O Advisory Board		
•Armando Pires	•Carlos Couto	<ul> <li>Marek Hartman</li> </ul>
Polytechnic Institute of Setúbal, (Portugal)	University of Minho (Portugal)	Gdynia Maritime University (Poland)
Chairman of POWERENG 2007, 2009	■Eric Monmasson	<ul> <li>Marija Zima</li> </ul>
•Ilhami Colak	University of Cergy - Pontoise (France)	ABB Schweiz AG (Switzerland)
Gazi University (Turkey), Chairman of	<ul> <li>Fernando Silva</li> </ul>	<ul> <li>Mladen Kezunovic</li> </ul>
POWERENG 2013	Technical University of Lisbon (Portugal)	Texas A&M University (USA)
Jose Aguado	•Frede Blaabjerg	<ul> <li>Qing-Chang Zhong</li> </ul>
Malaga University (Spain), Chairman of	Aalborg University (Denmark)	University of Sheffield (UK)
POWERENG 2011	•Giuseppe Buja	<ul> <li>Saulius Gudžius</li> </ul>
•Leão Rodrigues	University of Padova (Italy)	Kaunas Technical University (Lithuania)
Ex. Universidade NOVA de Lisboa	•Jānis Kleperis	<ul> <li>Virginijus Radziukynas</li> </ul>
(Portugal) Chairman of POWERENG 2009	University of Latvia (Latvia)	Lithuanian Energy Institute (Lithuania)
•Alexander Ruderman Nazarbayev	•Jānis Stabulnieks	<ul> <li>Kamal Al-Haddad</li> </ul>
Uinversity, Kazakhstan	Academical Insitute of Physical Energetics	Ecole de Technologie Superieure, (Canada)
■Andris Šnīders	(Latvia)	<ul> <li>Marco Liserre</li> </ul>
Latvia University of Agriculture (Latvia)	Julia Matevosyan	Polytechnic of Bari (Italy)
•Antans Saulus Sauhats	ELectric Reliability Council of Texas (ERCOT),	<ul> <li>Carlos Andrés Ramos Paja Universidad Nacional</li> </ul>
Riga Techncial University (Latvia)	(USA)	de Colombia (Colombia)
	•Carlo Cecati	
	University of L'Aquila (Italy)	
<b>O</b> Technical Committee		
Power Generation, Transmission and	Smartgrid Technologies & Applications	Renewable Energy Sources and Technology
Distribution •Anna Mutule	•Argo Rosin	<ul> <li>Diāna Žalostība</li> <li>Dias Tashrida (Ilaivaraitus (Ilatvia))</li> </ul>
	Tallinn University of Technology (Estonia)	Riga Technical University (Latvia)
Riga Technical University (Latvia)	<ul> <li>Josep Guerrero</li> </ul>	Giovanni Spagnuolo
•Lauri Kütt	Aalborg University (Denmark)	University of Salerno (Italy)
Aalto University School of Electrical	<ul> <li>Irina Oleinikova</li> </ul>	Enrique Romero-Cadaval
Engineering (Finland)	Riga Technical University (Latvia)	University of Extremadura (Spain)
• Ivo Palu		Victor Pires
Tallinn University of Technology (Estonia)	Power Electronics, Systems and	Polytechnic Institute of Setúbal (Portugal)
•Marek Jasinski	Applications	Education in Decus and Electrical
Warsaw University of Tehchnology (Poland)	Chandan Chakraborty	Education in Power and Electrical
Flash (and Masshires and Address bla	Indian Institute of Technology Kharagpur (India)	Engineering
Electrical Machines and Adjustable	<ul> <li>Dmitrijs Pikuļins</li> <li>Dies Technical Hainensite (Lateria)</li> </ul>	João Martins
Speed Drives	Riga Technical University (Latvia)	New University of Lisbon (Portugal)
<ul> <li>Anouar Belahcen</li> <li>Anouar Belahcen</li> </ul>	•Dmitri Vinnikov	<ul> <li>Nadežda Kuņicina</li> <li>Dies Technical Haisemite (Latvic)</li> </ul>
Aalto University (Finland)	Tallinn University of Technology (Estonia)	Riga Technical University (Latvia)
<ul> <li>Vanja Ambrožič</li> </ul>	Valery Vodovozov	Juan Jose Rodriguez Andina
University of Ljubljana (Slovenia)	Tallinn University of Technology (Estonia)	University of Vigo (Spain)
<ul> <li>Istvan Vajda</li> </ul>		Yousef Ibrahim
Óbuda Universrity (Hungary)		Monash University (Australia)

#### **O** Conference Location



#### **O** General information

- In accordance with the IEEE-IES Technical Co-sponsorship conditions papers should be accepted after a review process by three referees.
- Accepted papers will be presented in oral sessions. Poster sessions are not scheduled.
- The technical program committee will ask the authors for improving their papers according to the reviewer's recommendations.
- Initial submissions must be full papers. No abstracts will be reviewed.
- All submitted papers must be in Portable Document File (.pdf) IEEE Xplore compliant format. Instructions for typescript preparation are available on the conference website <a href="http://www.powereng2015.org/">http://www.powereng2015.org/</a>
- The accepted and presented papers will be published in the CD-Rom Workshop-Conference Proceedings and included in the IEEE Xplore database (also in SCOPUS), only if at least one author is registered using the registration form and has paid the registration fee.
- O Updated information at <a href="http://www.powereng2015.org/">http://www.powereng2015.org/</a>