## International Summer CRIS Workshop on Distributed and Renewable Power Generation (with certification) September 16 - 19, 2008

Distributed and renewable power generation is fundamental to the planning and operation of modern power systems. New requirements for power system planning and operation have to be specified to ensure safe operation and a high quality power supply. Specialized knowledge of RES technologies and power generation device modeling and performance and of the operation of transmission and distribution systems with distributed power generation is the prerequisite to resolving problems that already arise today and will certainly arise in the future.

The International Summer CRIS Workshop on Distributed and Renewable Power Generation provides engineers working on and with modern power systems an opportunity to acquire new skills and experience.

The workshop will concentrate on the working principles of power systems with a high penetration of distributed generation, the modeling of distributed power generation systems and the influence of distributed generation on power system safety, planning and operation.

The International Summer Workshop is intended for engineers working on and with distributed generation and power systems planning and operation. The workshop will be staffed by distinguished professors from Virginia Tech (USA), the University of Wisconsin-Madison (USA) and Otto-von-Guericke University Magdeburg (Germany), INPG Grenoble (France) and professionals from the European Commission and such international concerns as Siemens AG (Germany), Energinet.dk (Denmark) and the International CRIS Institute (Sweden).

At the end of the CRIS Workshop there will be given an official certificate of participation.

The workshop language is English.

Accommodations (mention the CRIS Workshop when making your reservation):

Hotel Ratswaage Magdeburg

Ratswaageplatz 1-4, 39104 Magdeburg, Germany

Tel: +49 391 59 26 193

Fax. +49 391 59 19 615

Special rate, single: €79

Email: reservierung@ratswaage.de

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#### International Steering Committee

Prof. Arun Phadke, IEEE and CRIS, USA, Chairman Prof. Zbigniew Antoni Styczynski, ZERE and Otto-von-Guericke University Magdeburg, Germany,

Vice Chairman Prof. Willis Long, University of Wisconsin-Madison, USA, Vice Chairman

Prof. James Thorp, IEEE and CRIS, USA

Prof. Nordin Hadjsaid, Past-President of CRIS Institute

Dr. Bernd Michael Buchholz, EU SmartGrid and VDE

Peter Borre Erikson, Energinet.dk, Denmark Dr. Rainer Krebs, Siemens AG, Germany

Dr. Gerhard Müller, ZERE, Fraunhofer IFF, Germany

#### **Local Organizing Committee**

Prof. Zbigniew Antoni Styczynski, Chairman Dr. Przemyslaw Komarnicki, Vice Chairman Ms. Melanie Baumgarten, Secretary

#### Registration

Otto-von-Guericke University Magdeburg Institute of Electric Power Systems Chair of Electric Power Networks and Renewable Energy Sources

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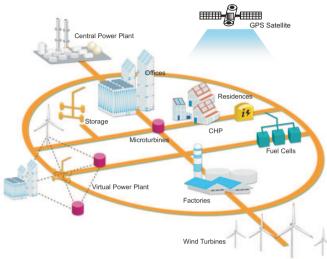
www.uni-magdeburg.de/fet/iesy/lena

#### Conference fee: €600 (€100 for students)

The conference fee covers workshop attendance, proceedings, refreshments during breaks, lunch on Tuesday through Thursday, Tuesday's Icebreaker Evening, Wednesday's Gala Dinner and excursions to Enercon and the VDTC.

The conference fee does not cover accommodations, which must be arranged individually.

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# Hotel Ratswaage Magdeburg, Germany September 16 - 19, 2008

















# International Summer CRIS Workshop on Distributed and Renewable Power Generation Magdeburg, Germany, September 16 - 19, 2008

Tuesday, September 16		Wednesday, September 17		Thurs	Thursday, September 18	
	Welcoming Remarks Prof. K. E. Pollmann		on 3: Wind Power Chair: Dr. R. Krebs		on 5: Power System Planning and Operation with DG Chair: Dr. A. G. Orths	
10:10	President of Otto-von-Guericke University Magdeburg  Welcoming Remarks  Prof. N. Hadjsaid  Past-President of CRIS Institute	9:00	<b>Wind Power in Ireland</b> Prof. M. O'Malley University College Dublin, Ireland	9:00	Technical and Regulatory Prerequisities to Smart Distribution Systems Dr. V. Bühner	
10:20	Saxony-Anhalt: The Renewable Energies State D. Schubert Saxony Anhalt State Secretary	9:45	Wind Power in the United States J. C. Smith Utility Wind Integration Group, USA	9:45	Practical Experiences with Student-built Wind Power Systems	
10:45	General Information on the 2008 CRIS Workshop Prof. Z. A. Styczynski	10:30	Wind Power in Denmark: A Case Study Dr. A. Orths		Prof. G. Venkataramanan University of Wisconsin-Madison, USA	
11:15	Workshop Chairman  Coffee break	11:15	Energinet.dk, Denmark  Coffee break	10:30	PMU and Power Quality Measurement and Monitoring Dr. P. Komarnicki	
Sessio	n 1: SmartGrids	Sessio	on 4: Wide Area Monitoring and Protection		Fraunhofer IFF, Germany	
	Chair: Prof. W. Long	<u> </u>	Chair: Dr. B. M. Buchholz	11:15	Coffee break	
11:45	SmartGrids: Power Systems of the Future Dr. B. M. Buchholz EU-Platform SmartGrids, Germany	11:45	Phasor Measurement Technology Prof. A. Phadke Virginia Tech, USA	11:45	Modeling and Simulation with PSS Dr. O. Ruhle Siemens AG, Germany	
	New Tools for Smart Tranmission Grid Operation Dr. W. Sattinger Swissgrid AG, Switzerland	12:30	Modern Power System Protection (Part 1) Dr. R. Krebs Siemens AG, Germany	12:30	<b>Power System Simulation with the DUtrain Simulator</b> Dr. J. Haubrock	
13:15	Network architectures for Dispersed Generation Prof. N. Hadjsaid INPG, Grenoble, France	13:15	Complex system of automation in the Romanian EPS for avoiding the frequency deviation during	13:15	DUtrain, Germany  Lunch	
14:00	Lunch		major disturbances' Dr. S. Gal, DM. Paunescu,	15:45	Certification	
<u>Sessio</u>	n 2: Photovoltaics, Fuel Cells and Storage Chair: Dr. P. Komarnicki		F. Lazar, Dr. R. Balaurescu Transelectrica, Romania	16:30	End of sessions	
15:45	Photovoltaic Systems in Germany A. Milner (invited)	14:00	Lunch	Frida	y, September 19	
16.20	Q-Cells AG, Germany  Fuel Cell Engineering:	15:45	<b>Wide Area Monitoring Applications</b> Prof. A. Phadke Virginia Tech, USA	9:00	Excursion to ENERCON Gmbh, departure from the hotel entrance	
10.30	State-of-the-Art and Future Prospects Prof. K. Sundmacher Max Planck Institute, Germany	16:30	Modern Power System Protection (Part 2) Dr. R. Krebs	12:00	Tour of the Fraunhofer IFF Virtual Development and Training Centre VDTC	
17:15	Energy Storage Systems: The Latest Trends	1	Siemens AG, Germany	13:00	End of the workshop	
	Prof. D. U. Sauer RWTH Aachen, Germany		End of sessions		ns to the 2008 CRIS Workshop	
18:00	End of sessions	18:30	Gala Dinner	Take stree	gdeburg Main Train Station etcar 1 headed for "Lerchenwuhne" or 8 headed for tter See" to the stop "Breiter Weg" and walk back	

(south) for roughly 2 minutes to Hotel Ratswaage (on the left)

18:30 Ice Breaker Evening