

# European Distributed Energy Resources Laboratories (DERlab) e. V.

**Roland Bründlinger**

**DERlab Workshop  
2011-10-05  
Kassel**



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# About DERlab



DERlab is an Association of laboratories, working in the area of the integration of distributed energy resources into electricity grids and the preparation of related standards and test procedures.

All laboratories have their own focus – from different power devices through to testing DER interconnections. Together the partners have comprehensive understanding of future electricity networks.



Plus new members from Spain, France & Greece  
CIEMAT, ITE, IREC, G2Elab & CRES (since October 2011)

# History of DERlab

## The DERlab Network of Excellence

### History

- In 2005, leading research institutes from 11 European countries started an extensive integration process in the framework of the "European Network of Excellence of DER Laboratories and Pre-Standardization".
- On the basis of this cooperation, the project partners sealed their cooperation by founding the association "European Distributed Energy Resources Laboratories" (DERlab)e.V. in 2008.



### Main Objectives

- Setup of a distributed, independent world-class DER laboratory for Europe
- Support for the development of European and international standards
- Achievement of a durable networking between European laboratories



Supported by the European Commission  
DG Research  
Contract SES6-518299



# DERlab Milestones, Vision and Mission



## 2008/2009

- DERlab e.V. foundation and establishment of legal entity



## 2010

- Establishment of DERlab office, first employments



- The 12<sup>th</sup> member (University of Strathclyde)
- Development of DERlab Services

## 2011

- April 2011 Institutes from Belgium, Finland, Luxembourg and The USA joined DERlab
- Establishment of an official technical liaison with CENELEC TC 8X
- October 2011 Institutes from Spain, France and Greece joined DERlab
- 21 full and supporting members

## Our Vision

To be the reference lab in Europe for the sustainable integration of Distributed Energy Resources into power systems.

## Our Mission

Perform tests, pre-competitive and pre-normative research, as well as training activities, supporting the transition towards more decentralized power generation.

# DERlab Board



Prof. Graeme Burt (University of Strathclyde, UK)

Maria-Luciana Rizzi (RSE, Italy)

Roland Bründlinger (AIT, Austria)

Dr. Philipp Strauss (IWES, Germany)

Peter Vaessen (KEMA, The Netherlands)

\* Roskilde, Denmark, March 2011.

# The people behind DERlab



Dr. Diana Craciun  
Research Coordinator



Alexander Berg  
Research assistant



Irene Knaub  
Management Assistant



Vincent Helmbrecht  
Student assistant



Sini Numminen  
Research assistant



Rand Al-Zu'bi  
Student assistant

# DERlab Activities & Services

Supporting the sustainable integration of Renewable Energy Resources and Distributed Generation in the electricity supply system by:

- Organising Events
- Pre-Standardisation research
- External Consulting Services
- Testing Services
- Staff Exchange
- Joint Research Activities
- Providing the Data Base of European DER Interconnection Specifications

**DEDIS**



\* 2nd European Smart Grids and E-Mobility Conference in Brussels

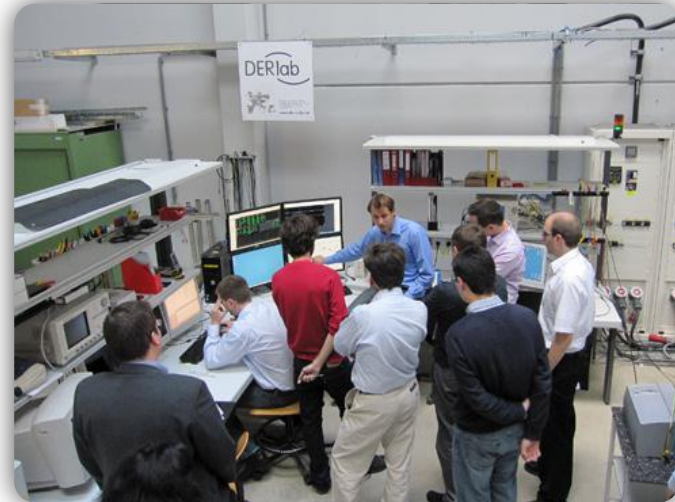
# DERlab Qualities



- Pool of laboratories facilities, ready for testing,
- Long term experience in DG technology,
- Strong background in testing & certification, including operation of accredited laboratories
- Active participation in national, European and international standardization (Official Technical Liaison Partner of CENELEC TC8X)
- Broad expertise by commercial and academic members.



High penetration PV Systems at SANDIA DETL



DERlab experts at joint P-HIL workshop at the AIT Smart Grids laboratory

# Pool of testing facilities available at DERlab members

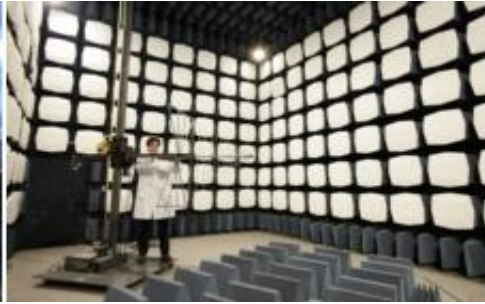
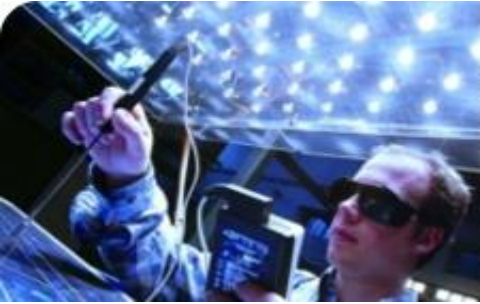


	High Voltage & High power	Power Quality & EMC	Hybrid Systems & Micro Grids	Power Electronics & Inverters	PV Components & Systems	Wind Components & Systems	Storage Components & Systems	Communication Technologies and Smart Metering	Fuel cell Components & Systems	Biomass system	Electrical vehicles	System Security and Reliability	Smart Building & Efficiency in Buildings
IWES		•	•	•	•	•	•	•	•	•	•		•
KEMA	•	•	•	•	•	•	•	•					
AIT	•	•		•	•		•	•					•
NTUA		•	•	•	•	•	•	•					
CRES		•	•	•	•	•	•	•	•				
CEA INES			•	•	•		•				•	•	•
TUS-RDS	•	•	•	•	•	•	•	•					
TU Łódź	•	•	•	•	•	•	•		•				
RSE	•		•	•	•		•	•		•	•		•
RISØ DTU	•	•	•	•	•	•	•	•			•		•
University of Strathclyde	•	•	•	•	•	•	•	•	•			•	
VTT		•	•	•		•	•		•			•	
SnT				•	•		•	•			•	•	•
EnergyVille *)		•		•	•		•				•		•
Sandia (DETL)	•	•	•	•	•		•	•	•			•	
University of Manchester	•	•	•	•	•	•		•					
TECNALIA	•	•	•	•	•	•	•	•	•		•	•	•

# DERlab Members



Plus 5 new members from Spain, France & Greece  
CIEMAT, ITE, IREC, G2Elab & CRES (since October 2011)



## Contact us:

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**Download activity report at**

[www.der-lab.net](http://www.der-lab.net)