

# HyLeiT Workshop #6

## Grid Forming in Electrolysis Plants



23rd of June 2025



**Abdelrahman Elhawash**  
INESC TEC and Porto  
University, Portugal



**Abdulrahman Alassi**  
Iberdrola Innovation, Qatar



**Zhiwang Feng**  
University of  
Strathclyde, UK



**Nils Wiese**  
Fraunhofer IEE,  
Germany

Welcome and short introduction of DERlab (Mohammed Al-Saadi, DERlab, Germany)  
Opening and moderation (Norbert Henze, Fraunhofer IEE, Germany)

## Agenda

13:00– 15:15

Welcome and short introduction of DERlab (Mohammed Al-Saadi, DERlab, Germany)

- Opening and moderation (Norbert Henze, Fraunhofer IEE, Germany)
  - Aims and motivation of this workshop
  - Introduction about the HyLeiT project
- Grid-Forming Technology: Supporting the Transition to Resilient Power Grids
  - (Abdulrahman Alassi, Iberdrola Innovation, Qatar)
- Inertia from Electrolyzers in Transmission Systems
  - (Nils Wiese, Fraunhofer IEE, Germany)
- Grid-forming for Network Resilience: A System Restoration Case Study
  - (Zhiwang Feng, University of Strathclyde, UK)
  - (Abdulrahman Alassi, Iberdrola Innovation, Qatar)
- Green Hydrogen Electrolysers in forming future Grids – Power Electronics Perspective
  - (Abdelrahman Elhawash, INESC TEC and Porto University, Portugal)

→ Discussion

15:15 – 15:30

Conclusions and end of meeting

Introduction:  
Dr.Ing. Mohammed  
ALSAADI

Project coordinator  
at DERlab office

## Previous Workshops

- ✓ DERlab / HyLeiT Workshop: “Market development of electrolysis systems taking system services into account”, Online, 08.11.2023.
- ✓ DERlab / HyLeiT Workshop: “Modeling of electrolysis plants on competent and system level”, Online, 05.12.2023.
- ✓ DERlab / HyLeiT Workshop: “Grid connection requirements for Electrolysis Plants”, Online, 11.09.2024.
- ✓ DERlab / HyLeiT Workshop: “Grid Forming in the Electrolysis plants”, Online, 23.06.2025.

## Upcoming Workshops

- ✓ DERlab / HyLeiT Workshop: “ Challenges of Electrolysis systems at relatively weak connection points”, Online, July/Aug., 2025.
- ✓ DERlab / HyLeiT Workshop: “Final Event”, Online, Sep., 2025.

# DERlab Network and services

- Around 40 members
- DERlab members offer accredited testing, validation and certification of DER-units and SG-equipment.
- Services
  - Contribution to standardisation activities
  - Knowledge exchange
  - Joint Activities
  - Information
  - Visibility



# Organisational Details

The slides for all workshops are available online in the DERlab website: <https://der-lab.net/derlab-co-organised-events/>

Please mute your microphones unless you are the presenter



For any technical or organisational issue please contact:

Daniela Neuschaefer, [daniela.neuschaefer@der-lab.net](mailto:daniela.neuschaefer@der-lab.net) / Phone: +49 561 788 083 10

Sören Lohr, [soeren.lohr@der-lab.net](mailto:soeren.lohr@der-lab.net) / Phone +49 561 788 083 19