

04th August

2025

13:00 CEST

15:30 CEST

Organisation:
DERlab e.V.

Online:
Microsoft
Teams

H₂GIGA – HyLeiT: WORKSHOP #7

Challenges of Electrolysis Systems at Relatively Weak Connection Points

Aims:

- Weak grid connection points
 - impact on electrolysis plants?
- Stability of the Hydrogen plant
 - safety risk and degradation?
- What challenges arise in the design of electrolysis plants?

Target group

Manufacturer, system integrator and researcher in the field of water electrolysis and electrical system technology



With funding from the:



Here the corresponding
MS TEAMS dial-in link:
Join the meeting :
[LINK to MS TEAMS meeting](#)

Meeting-ID:
320 694 334 528 5

Pass Code: LF3Zi6A4



HyLeiT Workshop #7

Challenges of Electrolysis Systems at Relatively Weak Connection Points



4th of August 2025



Alexander Unru
SMA Altenso GmbH, Germany



Thomas Schwabe
Siemens Gamesa Renewable Energy Deutschland GmbH, Germany



Michael Fette
Fette Dynamics GmbH, Germany



Jakob Hainyemba
Namibia Energy Institute – Center for Renewable Energy and Energy Efficiency, Namibia



Antonio Iliceto
CIGRE, Europe; ENTSO-E, Europe

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 Remarks and Moderation (Norbert Henze, Fraunhofer IEE, Germany)
 - Aims and Motivation of this Workshop
 - Introduction to the HyLeiT Project
- Grid-Friendly Hydrogen
 - (Alexander Unru, SMA Altenso GmbH, Germany)
- Challenges with Grid / without Grid
 - (Thomas Schwabe, Siemens Gamesa Renewable Energy Deutschland GmbH, Germany)
- Green Hydrogen Electrolysers in Forming Future Grids – Power Electronics Perspective
 - (Michael Fette, Fette Dynamics GmbH, Germany)
- Hydrogen Integration and its Implications for Weak Grid Infrastructure
 - (Jakob Hainyemba, Namibia Energy Institute – Center for Renewable Energy and Energy Efficiency, Namibia)
- Impact of Large-Scale Electrolysers on Power Grids
 - (Antonio Iliceto, CIGRE, Europe; ENTSO-E, Europe)

→ Discussion

15:15 – 15:30

Conclusions and End of Meeting



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: “Modeling of electrolysis plants on competent and system level”, Online, 14.11.2024.
- ✓ DERlab / HyLeiT Workshop: “Grid Forming in the Electrolysis plants”, Online, 23.06.2025.
- ✓ DERlab / HyLeiT Workshop: “ Challenges of Electrolysis systems at relatively weak connection points”, Online, 04.08.2025.

Upcoming Workshops

- ✓ 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



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