



8th Industry Workshop

Dresden, 25-26 September 2025

Advanced Alkaline Electrolysis

8th INDUSTRY WORKSHOP

Advanced Alkaline Electrolysis

Join the discussion on

- Advanced materials (electrode, separators, PTLs, gaskets etc.)
- Component manufacturing technology
- AEL and AEMEL technology

Target group

- Experts from industry and applied research

Topics

- Advanced catalysts and materials
- Manufacturing of parts and components
- Electrolyzer equipment
- Operation modes
- Present and future markets
- Novel alkaline electrolyzer concepts

PROGRAM

Thursday, 25 September 2025

9:30 **Welcome Coffee, Registration**

10:30 **Welcome Address**

10:40 **Solving Materials Science Challenges in Alkaline Water Electrolyzer Stack Assembly and Balance of Plant**

Jens Eichler, 3M Deutschland

11:00 **Testing (Alkaline) Electrolysers - From Single Cell to Plant**

Martin Uhlemann, EKTechnologies

11:20 **Scaling up Alkaline Water Electrolysis: Does Size Matter?**

Max Röhe, IAV

11:40 **Coffee break**

12:25 **Impulse**

12:30 **From Lab to Scalable Solutions: Next-Generation AEM Electrolysis by Antares**

Andrea Riva, Antares Electrolysis

12:50 **Six Years of Innovation Toward Market-Ready AEM Electrolysis**

Dietmar Neubacher, H2i GreenHydrogen

13:10 **Lunch Break**

14:10 **Impulse ALANTUM**

14:15 **From Powder to Performance: Custom Catalysts for Alkaline Hydrogen Systems**

Farnaz Sotoodeh, C2CAT

14:35 **Break-through Performance of Advanced Electrodes for Alkaline Electrolysers (ADELE) - and Open Questions Towards Full Industrialisation**

Olivier Bucheli, Adele Hydrogen

14:55 **Development, Testing and Production of Electrodes at GW Scale**

Francesco Pino, Industrie De Nora

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Further Information

Registration at the event homepage:

<https://www.ifam.fraunhofer.de/AEL>

Please register until 10 September 2025.

For organizational questions, please contact

info@ifam-dd.fraunhofer.de

Location: Fraunhofer Institute Centre
Dresden ([Directions online](#))

- 15:15 **Coffee break**
- 15:45 **Impulse**
- 15:50 **Impact of Power Fluctuations on the Performance of Alkaline Water Electrolysis**
Changhee Kim,
Korea Institute of Energy Technology (KENTECH)
- 16:10 **Hydrogen Production by SOEC and Alkaline Electrolysis - from Fundamentals to Real Application**
Stefan Klink, Topsoe
- 16:30 **Scaling Innovation – From Stack Prototypes to Industrial Alkaline Electrolyzer Systems**
Jens Klein, EBZ SysTec
- 16:50 **Multiphysics System Modeling of Large Electrolyzer Stacks**
Syed Sahil Hossain, John Cockerill
- 17:10 **Networking, Lab tour**
- 22:00 **End**

Friday, 26 September 2025

- 9:00 **Coffee**
- 9:30 **Impulse**
- 9:35 **Flexible Green Hydrogen Systems: Electrolyzer Technologies for Grid-Stabilization in High Renewables Penetration**
Sören Dresp, SunGrow
- 9:55 **Spin Enhanced Water Electrolysis**
José Gracia, Magnetocat
- 10:15 **Achieving High Efficiency Gas Separation in Green Hydrogen Production**
Ravi Alla, Elessent Clean Technologies
- 10:35 **Coffee break**
- 11:05 **Impulse**

- 11:10 **Beyond 2 m² PGM-free Electrodes for Alkaline Electrolysis**
Karsten Lange, RHEINMETALL
- 11:30 **Enhancing the Performance and Durability of Raney Type Nickel Electrodes for Alkaline Water Electrolyzer**
Zhihong Tang, Linde Advanced Material Technologies
- 11:50 **High Performance 3 D Nickel Electrode for Alkaline & AEM Water Electrolysis**
Takeda Kosei, Sumitomo Electric Industries
- 12:10 **Lunch**
- 13:10 **End**

CONTACT

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