Monday, 25 August 2025

15:20 - 16:50 **Poster Session I**
Prometheus Hall

Submission ID

Voltage Breakdown Analysis - A Dive into Tafel-Equation and Mass Transport Fabian Scheepers[1] [1]Forschungszentrum Juelich - IET-4 — 1

Transient Operating Strategies for Fischer-Tropsch Tail Gas Recirculation into a 120 kW SOEC Reactor Matthias Riegraf[1] [1]German Aerospace Center (DLR) — 7

Identification of loss processes in PEMWE Debora Brinker[1] [1]Karlsruhe Institute of Technology - Institute of Applied Materials - Electrochemical Technologies — 19

Ohmic resistance: the bubble story of alkaline water electrolyzers Saksham Pandey[1] [1]PhD candidate, TU Eindhoven — 24

Cold rolled aluminium foil on nickel mesh as a route to high-performance Raney nickel electrodes for hydrogen production in alkaline electrolysis Matthias Gramlich[1] [1]Fraunhofer IFAM, Dresden Branch — 26

Performance and Durability Trends of Low-Iridium Loaded Electrodes with Commercial Catalysts in PEM Water Electrolysis Nikolai Utsch[1] [1]Forschungszentrum Jülich — 27

Influence of Iron on the Oxygen Evolution Reaction in Anion Exchange Membrane Water Electrolyzers (AEMEL) Ellis Donker[1, 2] [1]TNO, [2]TUE — 33

How electrode surface engineering and bubble mannt improves alkaline water electrolysis Hannes Rox[1, 2] [1]Institute of Fluid Dynamics, Helmholtz-Zentrum Dresden-Rossendorf, [2]Institute of Process Engineering and Environmental Technology, Technische Universität Dresden — 35

Validation of ENDURE testing protocols using a 10 kW baseline stack with Ni foam electrodes Lidia Martínez Izquierdo[1] [1]Aragon Hydrogen Foundation — 36

µ-kinetic modelling of IrO2 dissolution as catalyst for PEM Water Electrolysis Pål Emil England Karstensen[1] [1]SINTEF Industry — 37

Advancing Standardization in Alkaline Water Electrolysis Felix Lohmann-Richters[1] [1]Electrochemical Process Engineering (IET-4),Forschungszentrum Jülich GmbH — 42

Bio-Inspired Electrocatalyst from Cable Bacteria for the Oxygen Evolution Reaction Kimia Zarean Mousaabadi[1] [1]Center for Electromicrobiology, Section for Microbiology, Department of Biology, Aarhus University, Aarhus C, Central Jutland, Denmark — 43

Novel 3D Fibrous Electrodes for Water Alkaline Electrolysis Andrea Russo[1] [1]Technical University of Denmark — 50

Understanding and controlling crack formation in catalyst layers for PEM electrolysis Nadine Zimmerer[1] [1]Thin Film Technology / Karlsruhe Institute of Technology — 51

Large amplitude fluctuations in water electrolyzer current supply: dynamic voltage response modelling and effect on active power consumption Pietari Puranen[1] [1]LUT — 52

Tuesday, 26 August 2025

16:50 - 18:30 **Poster Session II & Drinks**
Prometheus Hall