

KEY TOPICS

Science & Know-how

Membrane related Electrochemical Processes/Hydrogen

- Materials, catalysts, cells, stacks, balance of plant components
- Characterisation, diagnostics, modelling, simulation, lifetime, durability, Degradation-Mitigation, Accelerated testing
- Hydrogen - fuel processing & purification
- storage materials & systems including theory and modelling

Bridge to Products

Component Performance

- State of the Art commercially available catalysts, membranes, MEAs, bipolar-plates, interconnects, seals,... stack modules & generators
- Stack and system design and integration
- Operation strategies and monitoring
- Low cost & high productivity manufacturing technologies, in line inspection & quality aspects

Industrial Achievements & R&D Inventions

Approches & Design of Systems, Applications & Combinations

- Experience and performance of power trains and vehicles – incl. hybrid applications
- Performance of electrolyser technologies: Implementation and market expectations
- Early market applications incl. portable and stationary applications – Use and integration in market environment

Exchange Platform

Special Topics

- Similarities & differences: Fuel cells – redox flow batteries
- Electro chemical CO₂ reduction: status & perspectives
- Microbial fuel cells – BioElectric-systems: Status, research findings and development