

Electrochemistry Oriented Material R&D for Hydrogen Technologies

Event - Electrochemistry Oriented Material R&D for Hydrogen Technologies

Title	Electrochemistry Oriented Material R&D for Hydrogen Technologies
When	Mon, 12. May 2025
Created by	Sune Veltzé

Description

Abstract: Renewable energy storage and conversion through hydrogen, well-recognized and widely validated technologies, are under unprecedented development among leading nations. Materials and their processing are key elements forming fundamentals of the hydrogen empire and govern the technologies through efficiency, robustness, cost and environment impact. Clean energy transition demonstrates 40% growth compared with 2022. Low-emissions hydrogen will remain expensive in the short term[1], but costs are expected to fall significantly driven by technology innovation and maturity of the entire value chain. In this talk, I would like to share some of our unique experiences on material and component R&D on hydrogen Key Enabling Technologies (KETs), especially Proton Exchange Membrane (PEM) based fuel cells and electrolyzers. Those topics serve as inspirations for market-oriented technology intensification, governmental policy guidance and motivation for multisector coupling. Tenure Track Asso. Prof., Group leader, Principal Investigator, Lab manager Shuang Ma Andersen, University of Southern Denmark & SDU Climate Cluster, has over 20 years' experience in advanced energy material development, including electrocatalyst, conductive polymer, interface structure, diffusion phenomenon, material circularity, etc. She has participated and managed 30+ domestic and international projects. Her top skills cover R&D, dissemination, management, innovation, leadership, strategy and relationship. Join Zoom Meeting <https://dtudk.zoom.us/j/64472065526?pwd=4VZq0jBZe5BPyhK1IPkWnzMYHsXFFO.1>

Venue - Online

Location	Online
-----------------	------------------------