FREE ONLINE WEBINAR

Ammonia as a Fuel

Materials Integrity Challenges in Next-Generation Energy Systems

November 19, 2025

11:00 AM/12:45 PM

This joint workshop addresses the critical role of materials integrity in enabling ammonia-fuelled energy conversion. Experts from leading European projects and institutions will discuss degradation mechanisms, novel material developments, and testing strategies for solid oxide fuel cells and ammonia cracker systems, paving the way toward durable, efficient ammonia-based energy solutions.

Privacy notice: Parts of the webinar will be recorded and made publicly available an projects' communication channels, such as YouTube or project website.

Webinar's agenda

- Welcome words (VTT, SINTEF) - 5'
- Introduction to ammonia use as a fuel and main challenges (Santeri Saxelin, VTT) -10'
- Nitridation resistance of alloys for the BoP of an ammonia cracker system (Belma Talic, SINTEF) - 20'
- New material solutions for ammonia cracking above 550°C (Katharina Beck, DECHEMA) - 20'

10 minutes break

- Ammonia and SOFCs: From Materials Development to Stack Module Operation (Antonio Alfano, Elcogen Oy) - 20'
- Single repeating unit testing and investigation of interconnect materials in simulated NH3 feed (Anders Bogh, DTU) - 20'
- Protecting Stainless Steel in Ammonia SOFCs: Challenges, Materials & Coating Methods (Debasish Chakraborty, Alfa laval) - 20'
- Plenum discussion - 10'
- Common Q+A

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Clean Hydrogen Partnership

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