

Announcement of a session on “Hydrogen in the Energy Transition”



Don't forget...abstract submission deadline: January 16, 2026!

Hydrogen is key for the large-scale distribution and storage of energy, thus playing a crucial role in the energy transition. The surplus of renewable electricity can be turned into H₂ in electrolyzers, transported, stored, and used for electricity production in fuel cells, for heating, and in combustion engines.

The challenge is to find suitable materials and ensure the **safe operation** in environments linked to **hydrogen synthesis, transport, storage and application**. These environments are not only corrosive but can induce entry of atomic hydrogen into the material.

Building on the positive experience from Stavanger, this JS will foster cross-sectorial exchange between researchers and industry representatives on:

- Selection and development of hydrogen-ready materials and their corrosion protection.
- Materials challenges of hydrogen formation & transport and related safe operating conditions.
- Hydrogen entry from pressurized gas, water solutions, and other sources.
- Corrosion-induced hydrogen entry into high-strength alloys for lightweight vehicles.
- Existing and novel testing procedures.

Note: All internal material-hydrogen interactions (trapping, crack nucleation and growth mechanisms, etc.) will be addressed in the regular WP 5 – Environment Sensitive Fracture session.

Session organisers:

J. Kittel, G. Hinds & T. Prošek
WP 26 – Corrosion in Green & Low Carbon Energy Technologies

C. Blanc & D. Engelberg
WP 5 – Environment Sensitive Fracture

Expected duration: 2 days

Expected audience: 50–100 persons



Please submit your abstract online via www.eurocorr.org before the deadline. We are looking forward to your contribution and participation in EUROCORR 2026, on September 6-10, 2026, in Dublin, Ireland!