

Stavanger, Norway

# EUROCORR 2025

7 - 11 September

## EUROPEAN CORROSION CONGRESS

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

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 H<sub>2</sub> 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.

This JS will foster cross-sectorial exchange between researchers and industry representatives on:

- Selection and development of hydrogen-ready materials and their corrosion protection.
- Mechanisms and material challenges of H<sub>2</sub> formation & hydrogen-surface interactions.
- 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 WP5 – Environment Sensitive Fracture session.*

#### Session organiser:

T. Prošek & J. Tidblad

WP 25 – Atmospheric Corrosion

M. Wilms & G. Hinds

WP 26 – Corrosion in Green & Low Carbon Energy Technologies

C. Blanc & D. Engelberg

WP 5 – Environment Sensitive Fracture

Expected duration: 2 days

Expected audience: 60-120 persons



**Please submit your abstract online via [www.eurocorr.org](http://www.eurocorr.org) before 17<sup>th</sup> of January 2025. We are looking forward to your contribution and participation in EUROCORR 2025, on September 7-11, 2025, in Stavanger, Norway!**