Announcement of a session on "Hydrogen in the Energy Transition"

EUROCORR THE ANNUAL CONGRESS OF THE EUROPEAN FEDERATION OF CORROSION
PRAGUE 2027
23TH INTERNATIONAL CORROSION CONGRESS
ICC PRAGUE2027

Don't forget…abstract submission deadline: January 31, 2027!

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_2 in electrolysers, 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.
- 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 & 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

EUROCORR The European Corrosion Congress

EFC EUROPEAN FEDERATION OF CORROSION

Please submit your abstract online via www.eurocorr.org before the end of January 2027. We are looking forward to your contribution & participation in EUROCORR & ICC 2027 (September 12-16, 2027, Prague, Czech Republic)!