

## Track 5: Hydrogen separation & Purification

Track Coordinator: **Dr. Adolfo Iulianelli** (a.iulianelli@itm.cnr.it)

### DESCRIPTION OF THE TRACK

WHEC-2022 is a multidisciplinary international conference hosted by the International Association of Hydrogen Energy. The conference will offer both onsite and online presentations and exhibitions. In this track, authors are cordially invited to submit their extended abstracts in the field of Hydrogen separation & Purification. Some key topics are listed here as a guide for the authors. The authors should submit their extended abstracts with a choice for either oral or poster presentations.

### KEY TOPICS

(Topics include but not limited to the following)

- Polymeric membranes for H<sub>2</sub> separation/purification
- Metallic membranes for H<sub>2</sub> separation/purification
- Hybrid membranes for H<sub>2</sub> separation/purification
- Membrane condensers as a pre-treatment H<sub>2</sub> separation process
- Intensified H<sub>2</sub> generation & purification by membrane reactors
- Syngas upgrading
- Water gas shift reaction
- Pressure swing adsorption
- CO<sub>2</sub> pre-combustion capture
- Cryogenic distillation
- Electrochemical H<sub>2</sub> separation
- Photoelectrochemical water-splitting
- Physical absorption for H<sub>2</sub> separation from hydrocarbons
- Hydrogen separation by metal hydrides
- H<sub>2</sub> purification by partial condensation

### Important Dates

Extended abstract due: December 15, 2021  
Notification of abstract acceptance: February 15, 2022

### WHEC2022 Tracks

- Track 1: Hydrogen Production: Thermochemical and Photonic Methods
- Track 2: Hydrogen Production: Electrolysis
- Track 3: Hydrogen Production: Biological Methods and Biohydrogen
- Track 4: Hydrogen Production: Nuclear
- Track 5: Hydrogen Separation and Purification
- Track 6: Hydrogen Storage
- Track 7: Fuel Cells: PEMFC
- Track 8: Fuel Cells: SOFC and other types
- Track 9: Integrated Hydrogen Energy Systems
- Track 10: Power to Gas
- Track 11: Hydrogen Safety
- Track 12: Codes, Standards and Regulations
- Track 13: Strategies and Policies
- Track 14: Hydrogen Industry, Commercialization and Marketing, Applications
- Track 15: Hydrogen Economy, Logistics, Infrastructure
- Track 16: Environmental Impact and Sustainable Development
- Track 17: Social Dimensions

