

# Green Hydrogen Generation and its Application as a Fuel

## 1st HyGen Workshop

### Scientific Committee

- **Patrizia Bocchetta**, Department of Innovation Engineering, University of Salento (Lecce, Italy)
- **Meenal Gupta**, Department of Innovation Engineering, University of Salento (Lecce, Italy)
- **Antonio Ficarella**, Department of Innovation Engineering, University of Salento (Lecce, Italy)
- **Vincenzo Baglio**, CNR-ITAE (Messina, ITALY)
- **Isabella Nicotera**, Department of Chemistry and Chemical Technologies, University of Calabria (Rende, Italy)
- **Ghulam Yasin**, School of Environmental Science and Engineering, Tianjin University (China).

### Local Organizing Committee

- **Patrizia Bocchetta**, Department of Innovation Engineering, University of Salento (Lecce, Italy)
- **Meenal Gupta**, Department of Innovation Engineering, University of Salento (Lecce, Italy)
- **Filippo Selleri**, Labsel s.r.l., Lequile (Lecce, Italy)
- **Giorgia Pino**, Department of Innovation Engineering, University of Salento (Lecce, Italy)
- **Vincenzo Caramia**, Department of Innovation Engineering, University of Salento (Lecce, Italy)

08-10 April 2024 | 10:00 AM | Google Meet

### Aim

The workshop aims to provide the importance of hydrogen as future fuel.  
The covered topics are:

1. Production
2. Storage and distribution
3. Use (in fuel cells or other devices)
4. Potential future fuel
5. Environment concern with H<sub>2</sub>



### Objectives

- Overview of the current state of the art in hydrogen production
- Introduce to fuel cell technologies and their applications in powering electric vehicles
- Equip with the skills and knowledge necessary to conduct economic and environmental analysis
- Familiarize participants with policy frameworks and incentives
- Promote collaboration and networking among participants

### Themes

- Introduction to Hydrogen (Properties, benefits, challenges)
- Types of Fuel Cell Electric Vehicles
- Hydrogen Production (Electrolyzers, Metal hydrolysis, Biomass conversion)
- Fuel Cell Technology
- Performance and Efficiency Analysis of hydrogen generation reactors
- Materials and physico-chemical aspects of technologies involving hydrogen

### Publications

- Abstract booklet will be published in Scopus Indexed <https://conferenceproceedings.international/>.

### Keynote lecturers

1. **Carmelo Lo Vecchio**, CNR-ITAE (Messina, Italy)  
“Innovative tandem photoelectrochemical cells for green hydrogen production”
2. **Adolfo Iulianelli**, CNR-ITM (Rende, CS, Italy)  
“Hydrogen and membrane engineering in the field of Green Energy and Sustainable Processes”
3. **Ghulam Yasin**, Tianjin University (China)  
“Creating a Sustainable World: the Next-Generation Green Hydrogen Production Technologies Enabled by Advanced Nanomaterials”
4. **Pasquale Daniele Cavaliere**, University of Salento (Italy)  
“Hydrogen employment in Ironmaking”
5. **Yogesh Kumar**, University of Delhi (India)  
“Carbon-based materials for hydrogen generation”

### Academically:

- Gain an in-depth understanding of green hydrogen and fuel cell electric vehicles.
- Learn about the production, storage, and distribution of green hydrogen.
- Learn about the use of green hydrogen in fuel cell electric vehicles.
- Learn about the potential of green hydrogen to replace fossil fuels.

### Professionally:

- Gain a competitive edge in the job market.
- Develop the skills and knowledge that you need to be successful in this growing field.
- Network with other professionals who are interested in green hydrogen and fuel cell electric vehicles.
- Produce zero tailpipe emissions, which can help professionals who are concerned about the environmental impact of their work.

### Workshop Outcomes

- Increased understanding of fuel cell technology
- Increased awareness of the potential of hydrogen
- Knowledge of hydrogen production methods
- Better understanding of infrastructure development
- Enhanced collaboration and networking

### Key Takeaways

- e-Abstract booklet (Scopus-indexed)
- e- Certificate for participation

### Deadlines:

Abstract submission and registration with payment: **10<sup>th</sup> March 2024**

Notification of acceptance of abstract: **20<sup>th</sup> March 2024**

Registration link: <https://forms.gle/HBHGENUuNHhYWtZTA>

### REGISTRATION FEES (including VAT)

Professors, Assistant Professors, Researchers:

- UE countries: 120 euros
- Extra-UE countries: 60 euros

PhD students: 50 euros

Industrial: 150 euros

Students as attendee (limited seats-35): free

### Payment Desk Details

Payment by:

- **BANK TRANSFER:** Beneficiary: XRtechnologysrl  
Bank name: Banca Sella  
IBAN: IT56W0326816001052185926780 - SWIFT: SELBIT2BXXX  
*Reason:* HyGen Workshop+name of person attending the workshop
- **PAYPAL:** <http://www.xrtech.it/workshop/>

### Contact Information

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