





DIPARTIMENTO DI INGEGNERIA DELL'INNOVAZIONE

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

<u>Aim</u>

The workshop aims to provide the importance of hydrogen as future fuel.

- The covered topics are:
 - Production
 Storage and distribution
 - Storage and distribution
 Use (in fuel cells or other devices)
 - 4. Potential future fuel
 - 5. Environment concern with H₂

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

<u>Themes</u>

- 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"







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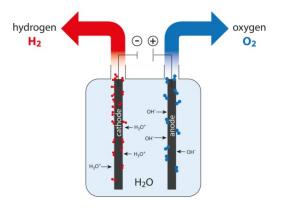
Academically:

- 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

<u>Key Takeaways</u>

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

Deadlines:

Abstract submission and registration with payment: 10th March 2024 Notification of acceptance of abstract: 20th March 2024 Registration link: <u>https://forms.gle/HBHGENUuNHhYWtZTA</u>

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: <u>http://www.xrtech.it/workshop/</u>

Contact Information

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