



HYDROGEN

for Clean Power and Mobility

WORKSHOP PROGRAM | May 28-29

LOCATION Augusta Trayana Hall

Trakia University - Stara Zagora, Bulgaria

DAY 1 | MAY 28, 2026 | HYDROGEN MASTERCLASS

8:30 - 9:00

WELCOME & REGISTRATION

OFFICIAL OPENING

9:00 - 9:10

Welcome Address

Prof. Miroslav Karabaliev | Rector of Trakia University, RRP Project Coordinator

9:10 - 9:30

**Building the Future of Hydrogen in Stara Zagora:
A Story of Growth, Vision, and Transformation**

Prof. Daria Vladikova | Executive Director of H2START-Trakia University [25 min+5 min Q&A]

HYDROGEN MASTERCLASS State of the Art across the Hydrogen Value Chain - From Lab to Startup

9:30 - 10:25

Why hydrogen? ID Card and Some Stunning Answers to Rarely Asked Questions

Alain THOREL | Trakia University / ICARE [45 min+10 min Q&A]

10:25 - 10:50

COFFEE BREAK

10:50 - 11:45

Geogenic Hydrogen and Hydrogen Geological Storage

Orlando VASELLI | University of Florence / CNR-IGG [45 min+10 min Q&A]

11:45 - 12:40

Hydrogen Production: Different Routes, Current Status, and Main Challenges

Julie MOUGIN | CEA [45 min+10 min Q&A]

12:45 - 12:50

GROUP PHOTO

12:50 - 14:10

LUNCH & MEDIA BREEFING

14:10 - 15:05

Hydrogen Storage and Transport Technologies: Principles, Development, and Recent Progress in China LI Song | HUST/ICARE [45 min+10 min Q&A]

The Hydrogen for Clean Power and Mobility Workshop is co-organized by the National Recovery and Resilience Plan – Development of Research and Innovation at Trakia University in the Service of Health and Sustainable Well-Being Project (No. BG-RRP-2.004-006), financed by the Program for Education 2021-2027 and Project H2START - Centre of Excellence for Hydrogen Technologies, financed by the European Union under Horizon Europe (GA 101136692) and the Programme for Research, Innovation, and Digitalisation for Smart Transformation 2021-2027.



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15:05 - 16:00 **General Uses of Hydrogen** Massimo SANTARELLI | Polito [45 min+10 min Q&A]

16:00 - 16:25 **COFFEE BREAK**

16:25 - 17:20 **Bridging the Valley of Death: The Role of Proof-of-Concept Programs in Science Valorization** Emilio PAOLUCCI | Polito [45 min+10 min Q&A]

TECHNICAL DEMONSTRATION

17:20 - 18:00 **HyBOPS, a Modular and Turnkey Test bench for Hydrogen Equipment - a Focus on PEM Fuel Cell System Testing** Loic CAMENEN | HORIBA [30 min+10 min Q&A]

18:00 - 19:00 **POSTER SESSION**

20:00 **DINNER**

DAY 2 | MAY 29, 2026 | HYDROGEN: BEYOND THE STATE OF THE ART

SESSION 1 Green Power Production

9:00 - 9:35 **KEYNOTE LECTURE: Beyond Technology: Social Challenges in the Hydrogen Transition** Agatino NICITA | CNR [30+5 min Q&A]

9:35 - 10:00 **Advancing PEM Water Electrolysis with Low-Equivalent-Weight Aquivion® Membranes** Fausta GIACOBELLO | CNR [20 m+5 min Q&A]

10:00 - 10:25 **PEM Electrolysis: The Catalyst Issue**
Christian BEAUGER | Mines-Paris [20 min+5 min Q&A]

10:25 - 10:45 **COFFEE BREAK**

10:45 - 11:10 **Biomass Valorization through Conversion into Energy Carriers and High Value-Added Products** Vitaliano CHIODO | CNR [20 min+5 min Q&A]

11:10 - 11:35 **Hydrogen Production: Coupling to RES**
Domenico FERRERO | POLITO [20 min+5 min Q&A]



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SESSION 2 Hydrogen Utilization

- 11:35 - 12:10 **KEYNOTE LECTURE: Hydrogen Fuel Cells for Stationary and Quasi-Stationary Applications** Nikolaos BONANOS | Materials Science Consultant [30 min+5 min Q&A]
- 12:10 - 12:35 **Proton Ceramic Cells as Pathfinders in Green Chemistry** Mariya E. IVANOVA | H2START-Trakia University [20 min+5 min Q&A]
- 12:35 - 13:45 **LUNCH**
- 13:45 - 14:10 **Routes of Improvements for Air/Steam Electrodes of Reversible Proton-Conducting Ceramic Cells** Asrar SHEIKH | H2START-Trakia University [20+5 min Q&A]
- 14:10 - 14:35 **Hydrogen Transport and Distribution: Insights from Simulation Activities of SHIMMER Project** Marco CAVANA | Polito [20+5 min Q&A]

SESSION 3 Green Mobility

- 14:35 - 15:10 **KEYNOTE LECTURE: Transport Sector Decarbonization in Large Scale - Challenges and Opportunities** Blagoy BURDIN | IEES-BAS [30 min+5 min Q&A]
- 15:10 - 15:35 **Hydrogen Mobility Beyond the Hype: Applications, Evidence and Research Challenges** Giuseppe NAPOLI | CNR [20 min+5 min Q&A]
- 15:35 - 16:00 **Development of Solid-State Hydrogen Storage: From Material Research to Lab-Scale Tank Prototyping** Rolando PEDICINI | CNR [20 min+5 min Q&A]
- 16:00 - 16:20 **COFFEE BREAK**
- 16:20 - 17:10 **From Hydrogen Pioneer to HydroShunter: Two Decades of Fuel Cell Innovation for Railway Decarbonisation** Stuart HILLMANSEN, University of Birmingham/Vanguard Sustainable Transport Solutions [45 min+5 min Q&A]

TECHNICAL DEMONSTRATIONS

- 17:10 - 17:35 **H2ICE: Italy's Innovation Hub for Hydrogen Internal Combustion Engines** Francesco BITRAJ | Unione Industriali Torino /online/ [20 min+5 min Q&A]
- 17:35 - 18:35 **Demonstrations with Hydrogen Fuel Cell Electric Vehicle Hyundai Nexa** Ivan IVANOV | IP Taxi [60 min]

18:35

CLOSING COCKTAIL WITH POSTER SESSION AND H2 CAR TEST DRIVES



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