



SAPIENZA
UNIVERSITÀ DI ROMA

Dipartimento
Ingegneria Chimica
Materiali Ambiente



HYDROGEN SUMMER SCHOOL

26-29 May 2026

ENEA Casaccia Research Centre

Hydrogen & e-Fuels: Innovation and Artificial Intelligence for the Energy of the Future

Sponsored by



School Program

Wednesday 27/05/2026

1°session - Gaseous e-Fuels

- 09:10 *SGL's digital transformation and early experiences in synthetic gas infrastructure*
Gianluca Vollaro, Linda Moretti SGI
- 09:40 *Hydrogen in Mobility*
Massimiliano Rossi Corporate & External Affairs,
Toyota Motor Italia
- 10:10 Question time.

10:30 Coffee break

2°session - Liquid e-Fuels

- 11:00 *Producing Biofuels for Hard-to-Abate Industries: Envisioning future applications. Insights from the HYDRA Project*
Filippo Cirilli, Maria Ilaria Pistelli RINA Consulting
- 11:30 *Enhancing Productivity and Project Quality through Digital Innovation and AI*
Elena Nespeca, Pierfrancesco Peppoloni T.EN Italy Solutions
- 12:00 Question time.

12:20 Lunch

3°session - e-Fuels

- 13:50 *Strategic Role of e-Fuels in the implementation of RED III*
Simone Mausoli, Giuseppe Signoretta Bureau Veritas
- 14:20 *Defossilizing aviation: why e-SAF must take off now*
Carlo Giorgio Visconti Politecnico di Milano
- 14:50 Question time

15:10 Project Workshop 2

18:10 End of day two

19:00 Social Dinner

Thursday 28/05/2026

1°session - AI for Hydrogen

- 09:10 *From Pipeline Construction site to Machine Learning Lab*
Key challenges in developing AI systems for the Energy industry
Roberta Colloca *Techfem*
- 09:40 *AVL Italia: Advanced Monitoring System for Industrial & H2 projects*
Nicolangelo Testa *AVL*
- 10:10 Question time.

10:30 Coffee break

2°session - AI for Hydrogen

- 11:00 *Case Study AI in diagnostic predictive fuel cell*
Pierpaolo Polverino *University of Salerno*
- 11:30 *Case study: the application of Digital twin to demo hydrogen plants, the case of H2Smart Lab*
Alberto Soraci, Gabriele Formis, Smritirekha Talukdar *AREA Science Park*
- 12:00 *Machine learning for process industry 5.0 - Successful industrial applications*
Pierantonio Facco *University of Padova*

12:50 Lunch

3°session - Gaseous e-Fuels

- 14:00 *From CO₂ capture to its chemical recycle*
Francesco Maestri *SIAD Tecno Project Industriale*
- 14:40 Question time

14:50 Project workshop presentation and debate

- 18:30 End of day three

Friday 29/05/2026

1° session – e-Fuels Project and Impact

- 09:10 *Hydrogen in International Cooperation)*
Matteo Micheli (tbc) UNIDO
- 09:40 *The Impact of e-Fuels on the Transport Sector*
Carlo Tritto Transport & Environment – T&E
- 10:10 *Hydrogen Safety Prevention: State of the Art and Future Perspectives*
Antonio Annecchini Corpo Nazionale dei Vigili del Fuoco
- 10:40 Question Time
- 11:00 **Attendance certificate & Coffee break & Summer School Close-out**
- 11:30 **Laboratory Tour**
- 13:00 End of Summer School