



SAPIENZA
UNIVERSITÀ DI ROMA

Dipartimento
Ingegneria Chimica
Materiali Ambiente



MINISTERO DELL'AMBIENTE
E DELLA SICUREZZA ENERGETICA



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

Tuesday 26/05/2026

10:00 Registration

11:00 Institutional Welcome

Tbc	MASE
Giulia Monteleone	ENEA - TERIN Director
Gaetano Iaquaniello	AIDIC

11:30 **Plenary Session1 – Hydrogen & e-Fuels Fundamentals**

Keynote lecture: “From Fossil Fuels to AI-Driven Energy Systems” Tbd

Hydrogen production, storage, and transport technologies Università La Sapienza

e-Fuels as energy carriers: synthesis routes and challenges Università La Sapienza

Question time

12:40 Lunch

14:00 **15:00 Plenary session 2 – Hydrogen & e-Fuels Fundamentals**

Lecture 3: state of the art of AI + Machine Learning

speaker tbd ENEA

Question time

15:00 Coffee break

15:30 **Interactive Session 1 - tbd**

17:30 End of day one

Wednesday 27/05/2026

09:10- 10:30 **1°sessione - Gaseous e-Fuels**

09:10 *Case study 1: AI in e-Fuels production plants*
Speaker tbd SGI

09:40 *Case study 2: AI in e-Fuels production plants*
Ing. Francesco Maestri SIAD Tecno Project Industriale

10:10 Question time.

10:30 Coffee break

11:00 - 12:30 **2°sessione - Liquid e-Fuels**

11:00 *Case study 3: AI in e-Fuels production plants*
Speaker tbd RINA

11:30 *Speaker tbd*

12:00 Question time.

12:20 - 13:50 Lunch

13:50 - 15:10 **3°sessione - e-Fuels & bio-fuel**

13:50 *Speaker tbd*

14:20 *Speaker tbd*

14:50 Question time

15:10- 18:30 **Interactive Session 2 - tbd**

18:00 End of day two

19:00 Social Dinner

Thursday 28/05/2026

09:10- 10:30 **1°sessione - AI for Hydrogen and e-Fuel**

09:10 *Lecture 7: Artificial Intelligence for energy optimization and predictive control*
Speaker tbd

09:40 *Speaker 8 Lecture 8: Machine learning in process modeling and digital twins*
Speaker tbd

10:10 Question time.

10:30 Coffee break

11:00 - 12:30 **2°sessione- AI for Hydrogen, e-Fuel and bio-fuel Systems**

11:00 *Case Study AI in diagnostic predictive fuel cell*
Pierpaolo Polverino *UNISA*

11:30 *Case study: AI in hydrogen production plants*
Alberto Soraci *AREA Science Park*

12:00 Question time.

12:30 - 13:50 Lunch

13:50 - 14:20 **3°sessione- AI for Hydrogen, e-Fuel and bio-fuel Systems**

14:20 *Speaker tbd*

14:30 Question time

14:30- 17:30 **Interactive session project debate**

18:00 End of day three

Friday 29/05/2026

9:00-9:30

09:10 - 10:30 **Session: e-fuel & bio-fuel economic evaluation**

Speaker tbd

Speaker tbd

10:30 -11:00 Coffee break

11:00 - 11:30 **Attendance certificate & Summer School Close-out**

11:00 - 13:00 **Laboratory Tour**

13:00 End of Summer School

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