

# Challenges and Opportunities of Research in the Production and Use of Green Hydrogen

**Speaker: Dr. Matteo Genovese**

Hydrogen is currently enjoying unprecedented political and commercial momentum, with an ever-increasing number of industrial-scale policy strategies and projects with global structure and scope, creating the real prospect of future opportunities. Well known for its industrial applications, such as the production of fertilizers or the reduction of the sulfur content in crude oil, the current interest in hydrogen is all about its potential as a "green" energy carrier. This application involves multiple disciplines, especially industrial and civil engineering, where research can make a significant contribution to supporting industry and the country's energy transition in the decarbonization processes. The seminar will focus on the challenges and opportunities that research encounters in the production of green hydrogen and its subsequent use as an energy carrier in the main energy sectors.

Date: 09/03/2023, 15:00

Seminar duration: 3 hours

In-presence Seminar: Aula Seminari, Cubo 44C, First Floor

Virtual Room (HyperLink, Click on the link): <https://teams.microsoft.com/seminar>

*About the speaker:*

*Graduated with honors in Energy Engineering, Matteo Genovese holds a Ph.D. in civil and industrial engineering, specializing in hydrogen technologies and refueling stations. With 10 months of research experience at the Hydrogen Research and Fueling Facility in Los Angeles, California, and 12 months in the industrial research consortium called Atena Future Technologies with ENEA, his research focuses on numerical modeling, experimental activities, and innovative concept investigation for fueling stations and hydrogen-based energy systems. At Ulster University's Hydrogen Safety Engineering and Research, he earned a Postgraduate Certificate of Professional Development in Hydrogen Safety. He is the author of more than 40 scientific works, a board member of an international journal's Topical Advisory Panel for Hydrogen, as well as a guest editor. Matteo Genovese is one of the top five most active researchers in the world according to the Scopus Database search for documents pertaining to both experimental and modeling activities on hydrogen refueling stations. Currently, he is a Post-Doc research fellow at the University of Calabria's Department of Mechanical, Energy and Management Engineering.*