UniBS – International Activities Program

Dr Francisco R Garcia-Garcia

Senior Lecturer in Chemical Engineering

School of Engineering

The University of Edinburgh

CATALISI PER L'ENERGIA E LA PROTEZIONE AMBIENTALE

SEMINARS 2023

IS GREEN AMMONIA THE WAY TO ACHIEVE NET ZERO?

Friday, 19th May 2022 14:30-16:30 Room: SEMINARI DICATAM 4th floor, Via Branze 43, Brescia

'Green hydrogen has been proposed as a promising alternative to traditional carbon-based fuels. However, due to safety concerns and the low energy density of hydrogen, the use of hydrogen carriers is required. Green ammonia, which is liquid at room temperature and low pressure conditions, has been proposed as a promising hydrogen carrier candidate. This seminar will overview current ammonia, and hydrogen economies.'

Registration is recommended. Please use on-line form below:
https://forms.gle/Aav9Aa4p7S9msG33A

UNIVERSITÀ DEGLI STUDI DI BRESCIA

Dr Francisco R Garcia-Garcia

Senior Lecturer in Chemical Reaction Engineering

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Dr. Garcia-Garcia's research focuses on sustainable solutions for emission control and energy production by emulating biological cell strategies. He addresses thermodynamic limitations, catalyst deactivation, and product separation, taking inspiration from cells that enclose reaction sites within permeable membranes and employ cyclic pathways for efficient and cost-effective chemical solutions. His research group aims to design multifunctional catalytic reactors integrating multiple processes in a single device. Overcoming the challenge of combining chemistry, materials science, and engineering knowledge is crucial for this concept. Dr. Garcia-Garcia's expertise lies in gas phase heterogeneous catalysis, new materials development, membrane technology, and chemical looping at the interface of chemistry and chemical engineering.

https://www.eng.ed.ac.uk/about/people/dr-francisco-r-garcia-garcia

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