

ECW | EMISSION CONTROL WORKSHOP

26-27th September 2024

Catalysis for Energy and Environmental Protection



Catalysis for Energy and Environmental Protection

Organising committee:

Dr N. Artioli (University of Brescia)

Dr Francisco R. Garcia-Garcia (The University of Edinburgh)

Dr Evangelos Papaioannou (Newcastle University)

SAVE THE DATE!

September 26th - 27th 2024



Location: Sala Consiliare – University of Brescia- Engineering Area, Via Branze 38, 25123 Brescia BS



Time: From 2:30PM of September 26th to 2PM of September 27th

Reserve your place for free



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OF BRESCIA

<https://www.eventbrite.co.uk/e/ecw-emission-control-workshop-tickets-1010365088177?aff=oddtcreator>

INTERNATIONAL WORKSHOP

PROGRAM

September 26th

14:30-15:00 Welcome and Registration
15:00-15:20 Introduction

SESSION 1 – HYDROGEN ECONOMY

15:20-15:40 Dr. Ewa Marek – University of Cambridge – Harnessing the enigmatic ortho-para isomeric conversion for energy efficient and low-carbon production of liquid H₂

15:40-16:00 Dr. Michail Tsampas – Dutch Institute For Fundamental Energy Research (DIFFER) – Material development via unconventional pathways for hydrogen production

16:00-16:20 Coffee break
16:20-16:40 Dr. Gioele Di Marcoberardino – University of Brescia- Membrane reactors for process intensification: green hydrogen from biogas in the MACBETH project

16:40-17:00 Dr. Maria Nordio – RSE - RSE Experimental pilot plants for biological methanation in trickle bed reactors

17:00-17:30 Discussion
17:20-18:00 Poster Session

September 27th

SESSION 2 – CARBON DIOXIDE ECONOMY

9:20-9:40 Dr Haresh Manyar – Queen's University Belfast – Catalysis and Process Engineering for Carbon Dioxide Refineries of Future

9:40-10:00 Dr Francisco Garcia Garcia – University of Edinburgh – Hollow Fibre Adsorption Unit for On-board Carbon Capture: The Key to Reducing Transport Emissions

10:00-10:20 Dr Evangelos Papaioannou– Newcastle University– Separation and concentration of CO₂ from air via a 'chemical potential handshake

10:20-10:40 Discussion
10:40-11:00 Coffee break

SESSION 3 – AMMONIA ECONOMY

11:00-11:20 Dr. Matteo Marchionni – University of Cagliari – Small scale plug-and-play systems for distributed green ammonia production

11:20-11:40 Dr. Umberto Raucci – Italian Institute of Technology (IIT) – How Do Alkali Metal Hydrides and Imides Catalyze Ammonia Synthesis and Decomposition?

11:40-12:00 Dr. Reza Vahidzadeh -University of Brescia – Ammonia recovery from leachate for energy use

12:00-12:20 Discussion
12:20-13:00 Lunch Break
13:00-14:00 Round table for grant proposal

