



UK Catalysis Hub Hydrogen Workshop

12 December 2025

University of Manchester, Oxford Road, Manchester, M13 9PL

Session 1

Engineering B Building, 2B.025

Chair:

Prof. Christopher Hardace, Manchester

9.00 -9.05

Welcome & Introduction

Chris or Andy (or Mg member)

9.05 -9.30

Prof. Sonya Calnan, Loughborough

Electro-catalyst stability for hydrogen generation under intermittent power conditions

9.30 – 09.55

Prof. Laurie King, Manchester Metropolitan University

Rational Design of Oxygen Evolution Catalysts for Electrochemical Hydrogen Production

09.55 -10:20

Dr. Lizzie Ashton, Loughborough

Low cost green hydrogen generation using battery electrolyzers

10.20 -10:45

Prof. Shanwen Tao, Warwick

Development of robust high temperature mixed OH-/H⁺ conducting membranes for fuel cells and electrolyzers

Session 2

Chair:

Dr. Josie Goodall, UK Catalysis Hub

10:45-11:15

BREAK – Engineering B Building, 2B.025 Foyer

11:15-11:40

Dr. Abolfazl Ghaderian, UCL

Ruthenium-Catalysed Water Oxidation for H₂ Generation: From Intermediates to Design Principles

11:40-12:05

Prof. Mi Tian, Bath

Neutron Scattering for Hydrogen Storage Materials from Fundamentals to Manufacture

12:05-12:30

Prof. Laura Torrente, Cambridge

Green ammonia as long-term energy and H₂ storage

12:30 -13:30

LUNCH

MOVE ROOMS

Session 3

Chair:

Prof. Andrew Beale, UCL/Finden Ltd

Nancy Rothwell Building, Blended Lecture Theatre GA.056 (Ground Floor)

13:30-13:55

Prof. Jin Xuan, University of Surrey

Using green hydrogen for net zero chemicals manufacturing

13:55-14:20

Asst. Prof. Nathan Skillen, Heriot Watt

Grey, Blue, Green or even Gold Hydrogen...*why do we have so many colours for a colourless gas?*

14:20-14:45

Dr. Sam Cobb, University of Manchester

Multiscale understanding of electrochemical systems: The case of integrated carbon capture and utilisation

Session 4

Chair: Dr. Josie Goodall, UK Catalysis Hub

14:45-15:15 **BREAK – Lecture theatre foyer**

15:15-15:40	Prof. Magda Titirici, Imperial College London	High-Throughput Electrocatalysis for a Circular Hydrogen Economy: From OER to Waste Valorisation
15:40-16:05	Dr. Lan Lan, Manchester	Enhancing Hydrogen Production from Bioenergy Crops via Photoreforming
16:05-16:30	Aranzazu Carmona Orbezo, Parallel Carbon	Turning Air Into Opportunity: Our Path to Dual-Molecule Production
16:30-17:00	Discussion	
17:00	Close	