

Actual Time	Time allocated (min)	
10:00	01:00	Registration and coffee Location: Council Room Foyer
		<b>Plenary Session 1</b> Location: Great Hall
		Chaired by: Nigel Brandon
11:00	00:05	Opening remarks by: Nigel Brandon
11:05	00:35	Plenary speaker 1A: <b>Ben Harrop - BEIS</b>
		Topic: Hydrogen in the UK low carbon economy
11:40	00:35	Plenary speaker 1B: <b>Dr Christian Walter - Sunfire</b>
		Topic: Status of SOEC and SOFC activities at Sunfire
12:15	01:00	Lunch Location: Senate Chamber
	01:20	<b>Parallel Session 1.1</b> Location: Great Hall Theme: Hydrogen Production Chaired by: Robert Steinberger-Wilckens
		<b>Parallel Session 1.2</b> Location: Senate Chamber Theme: Fuel Cells Chaired by: Anthony Kucernak
13:15	00:20	Keynote speaker 1.1.A: Nathaniel Cooper, Imperial College London Title: Framework for the Design & Operation of a Wind-Powered Gigawatt-Scale Hydrogen Electrolyzer
		Keynote speaker 1.2.A: Graham Smith, National Physical Laboratory Title: Measuring the Impact of Hydrogen Contamination on PEMFC Short Stacks
13:35	00:20	Speaker 1.1.B: Christopher de Leeuwe, Manchester University Title: H2 production via chemical looping methane reforming
		Speaker 1.2.B: Jennifer Hack, University College London Title: Four dimensional imaging of degrading polymer electrolyte fuel cells
13:55	00:20	Speaker 1.1.C: Laurie King, Manchester Metropolitan University Title: A non-precious metal hydrogen catalyst in a commercial polymer electrolyte membrane electrolyser
		Speaker 1.2.C: Daniel Smith, University of Nottingham Title: The Nature of Proton Shuttling in Protic Ionic Liquid Fuel Cells
14:15	00:20	Speaker 1.1.D: Bahman Horri, University of Surrey Title: Development of a red-ox process for sustainable production of hydrogen
		Speaker 1.2.D: Georgios Tsimekas, University of St Andrews Title: Spray pyrolysis strategy for preparation of cathode-supported protonic ceramic fuel cells
14:35	00:20	Speaker 1.1.E: Venkatesan Krishnan, Teesside University Title: Hydrogen generation using a catalytic membrane reactor (CMR) - steam methane reformer (SMR) - process simulation and reactor modelling
		Speaker 1.2.E: Alexandros Symillidis, Loughborough University Title: Ethanol electro-oxidation reaction (EOR) in alkaline medium using electrospun conductive polyaniline fibres as a promoter and support for Pd catalysts
14:55	00:25	Coffee Break Location: Great Hall
	01:20	<b>Parallel Session 2.1</b> Location: Great Hall Theme: Hydrogen Storage Chaired by: Tim Mays
		<b>Parallel Session 2.2</b> Location: Senate Chamber Themes: Policy, economic and social aspects of hydrogen and fuel cell technologies The role of hydrogen and fuel cells in the energy system Chaired by: Paul Dodds/ Robert Steinberger-Wilckens
15:20	00:20	Keynote speaker 2.1.A: Valeska Ting, University of Bristol Title: Hydrogen storage in nanoporous materials – insights from investigations into high density hydrogen
		Keynote Speaker 2.2.A: Paul Dodds, UCL Title: Insights from upcoming H2FC Supergen Hub report: UK industrial strategy opportunities from H2&FC report
15:40	00:20	Speaker 2.1.B: Mi Tian, University of Bath Title: Engineering porous materials for hydrogen application
		Speaker 2.2.B: Paul van Schaik, Teesside University Title: A method for developing energy citizenship to enable decarbonisation solutions
16:00	00:20	Speaker 2.1.C: Elizabeth Ashton, Loughborough University Title: Vapour hydrolysis of complex hydrides for mobile hydrogen storage
		Speaker 2.2.C: Robert Steinberger-Wilckens, University of Birmingham Title: Decarbonising freight transport - the role of hydrogen-based fuels
16:20	00:20	Speaker 2.1.D: Sanliang Ling, University of Nottingham Title: Extracting an Empirical Intermetallic Hydride Design Principle from Limited Data via Interpretable Machine Learning
		Speaker 2.2.D: Nixon Sunny, Imperial College London Title: Design of low-carbon hydrogen and CCS infrastructure for the decarbonisation of heat in the UK
16:40	00:20	Speaker 2.1.E: Marcus Adams, University of Nottingham Title: The potential for additive manufacturing to optimise heat transfer in metal hydride reactors
		Speaker 2.2.E: Xinjie Yuan, University College of London Title: A Novel Design of Solid Oxide Fuel Cell-Based Combined Cooling, Heat and Power Residential System in the UK
17:00	00:20	Coffee Break Location: Great Hall
		<b>Plenary Session 2</b> Location: Great Hall Chaired by: Gavin Walker
17:20	00:35	Plenary Speaker 2A: <b>Dr Michael Hirscher, Max Planck Institute for Intelligent Systems, Stuttgart</b> Topic: Hydrogen storage in nanoporous materials: Advantages and limitations
17:55	00:10	10-min break
18:05	01:00	<b>3MT competition</b> Location: Great Hall Members of the committee: <b>Tim Mays and Paul Dodds</b>
19:05	01:00	<b>Poster session 1 with DRINKS RECEPTION</b> Location: Great Hall
20:05	02:00	<b>Conference dinner</b> Location: Senate Chamber

Actual Time	Time allocated (min)	
08:00	00:30	Registration and coffee Location: Council Room Foyer
		Plenary Session 3 Location: Great Hall
		Chaired by: Sue Ellis
08:30	00:35	Plenary speaker 3A: <b>Dr Stuart Hawksworth, HSE, UK</b>
		Topic: <b>Safety of Hydrogen in the Energy System</b>
09:05	00:35	Plenary speaker 3B: <b>Fiona Landy, Scottish Cities Alliance</b>
		Topic: <b>Race to Zero?</b>
09:40	00:05	Five-minute break
	01:20	<b>Parallel Session 3.1</b> Location: Great Hall Theme: Hydrogen/Fuel Cell Systems and Applications Chaired by: David Book
		<b>Parallel Session 3.2</b> Location: Senate Chamber Theme: Hydrogen Safety Chaired by: Vladimir Molkov
09:45	00:20	Keynote speaker 3.1.A: Colleen Jackson, Imperial College London Title: Electrochemical Hydrogen Purification and Compression
		Keynote speaker 3.2.A: Sergii Kashkarov, Ulster University Title: Explosion-free in a fire composite hydrogen storage tank
10:05	00:20	Speaker 3.1.B: Yousif Al-Sagheer, University of Birmingham Title: Control approaches for integrating hydrogen system to renewable energy sources
		Speaker 3.2.B: Venkatesan V. Krishnan, Teesside University Title: Risk Assessment Procedure and Documentation for a Hydrogen production Laboratory
10:25	00:20	Speaker 3.1.C: Yucheng Wang, Northumbria University Title: Designed Fuel Cell Type Device for CO <sub>2</sub> Electrochemical Reduction Reaction
		Speaker 3.2.C: Paul Russell, Teesside University Title: Safety case study: Installation and operation of a low temperature hydrogen demonstrator in a laboratory on the 8th floor of a tower block
10:45	00:20	Speaker 3.1.D: Abigail Morris, National Physical Laboratory Title: Hydrogen quality for fuel cell electric vehicles: Stability of contaminants in hydrogen in gas cylinders at ISO 14687:2019 levels and challenges in representative offline sampling
		Speaker 3.2.D: Volodymyr Shentsov, Ulster University Title: Influence of nozzle shape on hydrogen-air mixing for high pressure hydrogen jet
11:05	00:20	Speaker 3.1.E: Nuoxi Zhang, University of St Andrews Title: Upgrading biogas through CO <sub>2</sub> electrolysis
		Speaker 3.2.E: Wulme Dery, Ulster University Title: Numerical study of instantaneous high-pressure hydrogen release in a tunnel
11:05	00:20	Coffee Break Location: Great Hall
	01:20	<b>Parallel Session 4.1</b> Location: Great Hall Theme: Hydrogen Storage Chaired by: Nilay Shah
		<b>Parallel Session 4.2</b> Location: Senate Chamber Theme: Fuel Cells Chaired by: John Irvine
11:25	00:20	Speaker 4.1.A: Alastair Stuart, University of Nottingham Title: TANK project - Solid Sate H <sub>2</sub> Storage
		Speaker 4.2.A Sivaprakash Sengodan, Imperial College London Title: Cation-swapped homogeneous nanoparticles in perovskite oxides for Solid oxide fuel cell anodes
11:45	00:20	Speaker 4.1.B: Petra Ágota Szilágyi, Queen Mary University of London Title: Size-controlled Pd nano-objects embedded in metal-organic frameworks for hydrogen storage and catalysis
		Speaker 4.2.B Peimiao Zou, University of Warwick Title: Investigation of Perovskite Oxide SrCo <sub>0.8</sub> Cu <sub>0.1</sub> Nb <sub>0.1</sub> O <sub>3-b</sub> as a Cathode Material for Room Temperature Direct Ammonia Fuel Cells
12:05	01:00	Lunch Location: Senate Chamber
		Plenary Session 4 Location: Great Hall
13:05	00:10	Chaired by: Nigel Brandon Chris Young to present the FCHJU funding opportunities for 2020. Chris Young (EU Energy Focus – UK National Contact Point for Horizon 2020 Energy)
13:15	00:35	Plenary speaker 4A: <b>Dr Sam French, Johnson Matthey</b>
		Topic: <b>Low Carbon Hydrogen</b>
13:50	00:35	Plenary speaker 4B: <b>Professor Gavin Walker, University of Nottingham</b>
		Topic: <b>Solid state technologies for hydrogen systems</b>
14:25	00:15	Closing remarks by: Nigel Brandon Best Poster and 3MT Awards
14:40	00:10	Coffee Break and Farewell Location: Great Hall
14:50	01:50	Advisory Board Meeting Location: Council Room