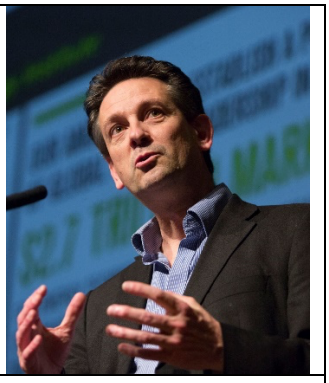
Name	Martin Freer
Affiliation	University of Birmingham, UK



Invited Keynote Lecture

Presentation Title	Hydrogen in the Midlands
Abstract (150 words)	The UK Midlands is the historical manufacturing powerhouse of the UK and was at the heart of the industrial revolution. In the green revolution the region is thinking about how it adjusts and how fuels like hydrogen are likely to play a role. This presentation will highlight some of the Midlands distinctive projects associated with hydrogen transport, heating and decarbonisation of industry and share some of the strategic thinking for the future of hydrogen, whilst rehearsing some of the challenges faced in widespread adoption of hydrogen.
Biographical Sketch (150 words)	Professor Martin Freer, a nuclear physicist, and Director of the Birmingham Energy Institute (BEI) at the University of Birmingham. He is also Director of the Energy Research Accelerator (ERA), which comprises eight internationally-renowned Midlands universities which are part of the Midlands Innovation partnership, together with the British Geological Survey. Martin is former Director of the Birmingham Centre for Nuclear Education and Research, which he established in 2010. He has overseen the development of the BEI, helped establish Energy Capital and has co-led the establishment of the joint University of Birmingham–Fraunhofer Germany research platform. He led the development of the Birmingham Energy Innovation Hub and the co-development of Tyseley Energy Park in Birmingham. In 2015 he co-led the BEI Commission “Doing Cold Smarter” chaired by Lord Teverson, and in 2012 he led the Policy Commission “Future of Nuclear Energy in the UK” chaired by Lord Hunt, he co-led the Policy Commission with Sir David King which saw the creation of Energy Innovation Zone in the West Midlands and in 2020 published a report on The Road to Low-Carbon Heat with the CBI chaired by Lord Billimoria. Most recently, he led the policy commission “Pathways for Local Heat” chaired by Sir John Armitt. He has championed the establishment of a National Centre for the Decarbonisation of Heat. His main research area is the study of the structure of light nuclei, using nuclear reactions. He received the Friedrich Wilhelm Bessel Prize, Humboldt Foundation, in 2004 and the Rutherford Medal in 2010.

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