

Early Career Researcher Net Zero Conference

27th-28th February 2024, Birmingham

Poster Session A; 17.00 - 17.45

Poster No.	Presenter	University	Title of Poster
A1	Azita Etminan	Swansea University	CO & CO ₂ -rich waste gases hydrogenation to maximise circularity in the steelmaking process
A2	Vikas Sharma	University of Brighton	Fuel matrix to improve ammonia combustion
A3	Yuanting Qiao	University of Sheffield	Techno economic analysis for DACCU
A4	Roberto Loza	Cardiff University	CO ₂ storage potential offshore Wales
A5	Akshay Bagde	University of Glasgow	Developing negative emission technologies for Hydrogen production using BECCUS
A6	Disni Gamaralalage	University of Nottingham	Potential of digestate for biochar production in the UK
A7	Maud van Soest	UKCEH	Can enhanced rock weathering be effective in upland grasslands?
A8	Yuzhou Tang	University of Leeds	Techno-economic spatial analysis system for biochar production – Case studies in East of England and East Midlands
A9	Maureen Okibe	University of Surrey	Semantic Synthesis for the Valorisation of Sugarcane Bagasse Feedstocks
A10	Withdrawn		



A11	Withdrawn		
A12	Ming Zhang	Aston University	Digital twin of fuel cell
A13	Maryam Khaksar Ghalati	University of Leicester	BOF Modelling for Sustainability: A Data-Driven Data Approach
A14	Nadine Moustafa	Imperial College London	An integrated framework for levelled up & low carbon industrial clusters
A15	Paola Saenz	Imperial College London	Comprehensive CDR Technology Assessment
A16	Jana Fakhreddine	UCL	Examining the role of hydrogen trade and derivatives in global energy system decarbonisation
A17	Juliana Morbec	Keele University	Designing organic/2D heterostructures for photovoltaic applications
A18	Han Wang	Imperial College London	Exaggerated potential for improvement in demand-side management with EV? Testing with observed and simulated consumer activities
A19	Ewan McQueen	University of Strathclyde	A brighter future: Conductive polymers as sustainable materials in solar fuels
A20	Samantha Bodman	Loughborough University	Improving Solar Cell Efficiency Using Singlet Fission Materials
A21	Samir Soares	University of Nottingham	Evaluating Rural Energy Accessibility in the UK
A22	Chamara Panakaduwa	University of Salford	Homeowner engagement for housing retrofit
A23	Harry Smith	University of East Anglia	Navigating Net Zero: Analysing Residual Emissions in Long-Term National Climate Strategies
A24	Bassey Bassey	Cranfield University	Exploring the Barriers to CCUS Implementation in Developing Countries: A Nigerian Case



A25	Sean McIntyre	Surface Measurement Systems	Investigating humidity effects when using membranes for carbon capture in the real world
A26	Luke Woodliffe	University of Nottingham	An Attractive Approach to Capturing CO ₂ - Magnetised MOFs
A27	Claire Leishman	University of Edinburgh	Zero Emissions Ammonia Power Technology

Poster Session B; 17.45 – 18.30

Poster No.	Presenter	University	Title of Poster
B1	Collette Larkin	The University of Edinburgh	Decarbonising transport using compact carbon capture: "All On-board!"
B2	Danial Qadir	Teesside University	Technical evaluation of open-art solvents for carbon capture integration in waste to energy plants
B3	Karolina Thomas	University of Cardiff	Circularity and CO ₂ utilisation opportunities in SWIC
B4	Alexander Harrison	University of Cambridge	Materials for production of ammonia in a chemical looping mode
B5	Withdrawn		
B6	Withdrawn		
B7	Aylin Kemal	Cranfield University	Development of carbonate-based direct air capture approach
B8	Dwica Wulandari	University of Manchester	Sustainability assessment of bioenergy in Indonesia



B9	Kofoworola Awodun	Brunel University London	Synthesis of sorbents for CO ₂ capture using sustainable waste materials
B10	Sam Reis	Swansea University	An overview of biomass use in iron ore sintering
B11	Dudul Das	University of Glasgow	Thermal energy storage with PCM-biochar form stable composite
B12	Muhammad Naveed Arshad	Aberystwyth University	Landscape decision system to achieve Net Zero
B13	Ibrahim Kadafur	Heriot-Watt University	Economic Valuation of Using Saline Aquifer as a CO ₂ Storage Buffer in CO ₂ -Enhanced Hydrocarbon Recovery
B14	Elgenied Elqurashi	University of Surrey	Designing local energy system model for local councils -Case study
B15	Vishal Vats	Net Zero Industry Innovation Centre	Catalyzing Change: How NZIIC Drives Industry Innovation Toward Net Zero Goals
B16	Billy Davies	Brunel University London	Exergy analysis of low-carbon hydrogen production
B17	Shuai Tao	University of Cardiff	Fifth-generation district heating and cooling: A review
B18	Yue He	UCL	The New Chance of CO ₂ Subsurface Storage in China Sedimentary Basins
B19	Sara Alão	Cranfield University	Design and optimization of a novel ionic wind propulsion thruster
B20	Lydia Frumosu	Cranfield University	Plasma surface engineering of light weight materials for sustainable transport
B21	Vijay Kumar	Aston University	Electrosynthesis of Cobalt imidazolate framework using bio solvents as a solvent medium to produce high crystalline MOFs tested for supercapacitor application
B22	Longinus Ifeanyi Igbojionu	Aston University	Deep eutectic solvent pretreatment of rice straw under autoclave condition.



B23	Olalekan Olatunji	Keele University	Determination of heavy metals in crude oil environment. A remediation approach
B24	Withdrawn		
B25	Poornima Kumar	University of Oxford	The systemic and climate impacts of digitalisation in daily life: a study of digital service acceptance in UK households
B26	Lois Pennington	University of Manchester	A Lifecycle Approach to Waste Management in the Aviation Sector

