

# Early Career Researcher Net Zero Conference

27<sup>th</sup>-28<sup>th</sup> February 2024, Birmingham

## Poster Session A; 17.00 - 17.45

Poster No.	Presenter	University	Title of Poster
A1	Azita Etminan	Swansea University	CO & CO <sub>2</sub> -rich waste gases hydrogenation to maximise circularity in the steelmaking process
A2	Vikas Sharma	University of Brighton	Fuel matrix to improve ammonia combustion
A3	Aliyu Ibrahim Nagidi	University of Hull	Integrating offshore wind with direct air carbon capture and storage in the Humber Industrial cluster
A4	Roberto Loza	Cardiff University	CO <sub>2</sub> 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	Ontology modelling for valorisation of sugarcane bagasse
A10	Sheikh Mahdi Ahmed	University of Sheffield	Decision making for industrial decarbonization



<b>A11</b>	Veronika Savchenko	University of Nottingham	Simulation of pellet breakdown during transport
<b>A12</b>	Ming Zhang	Aston University	Digital twin of fuel cell
<b>A13</b>	Maryam Khaksar Ghalati	University of Leicester	BOF Modelling for Sustainability: A Data-Driven Data Approach
<b>A14</b>	Nadine Moustafa	Imperial College London	An integrated framework for levelled up & low carbon industrial clusters
<b>A15</b>	Paola Saenz	Imperial College London	Comprehensive CDR Technology Assesment
<b>A16</b>	Jana Fakhreddine	UCL	Examining the role of hydrogen trade and derivatives in global energy system decarbonisation
<b>A17</b>	Juliana Morbec	Keele University	Designing organic/2D heterostructures for photovoltaic applications
<b>A18</b>	Han Wang	Imperial College London	Exaggerated potential for improvement in demand-side management with EV? Testing with observed and simulated consumer activities
<b>A19</b>	Ewan McQueen	University of Strathclyde	A brighter future: Conductive polymers as sustainable materials in solar fuels
<b>A20</b>	Samantha Bodman	Institute for Safe Autonomy, University of York	Improving Solar Cell Efficiency Using Singlet Fission Materials
<b>A21</b>	Tania Gomez Borraz	University of Glasgow	Ambitious plan for rural septic tanks upgrade towards carbon neutrality
<b>A22</b>	Chamara Panakaduwa	University of Salford	Homeowner engagement for housing retrofit
<b>A23</b>	Harry Smith	University of East Anglia	Navigating Net Zero: Analysing Residual Emissions in Long-Term National Climate Strategies
<b>A24</b>	Jennifer Hawkin	University of Cambridge	Are global net-zero proposals feasible, given the limited availability of key Zero-Emissions Resources?



## 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 <sub>2</sub> utilisation opportunities in SWIC
B4	Alexander Harrison	University of Cambridge	Materials for production of ammonia in a chemical looping mode
B5	Fayez Qureshi	Cranfield University	Photo electrochemical swing carbon capture and release
B6	Robert Sait-Stewart	University of Strathclyde	Enhanced production of value-added compounds and syngas from the supercritical water gasification of real-world biomass
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 <sub>2</sub> 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



<b>B13</b>	Ibrahim Kadafur	Heriot-Watt University	TBC
<b>B14</b>	Elgenied Elqurashi	University of Surrey	Designing local energy system model for local councils -Case study
<b>B15</b>	Vishal Vats	Net Zero Industry Innovation Centre	TBC
<b>B16</b>	Billy Davies	Brunel University London	Exergy analysis of low-carbon hydrogen production
<b>B17</b>	Shuai Tao	University of Cardiff	Fifth-generation district heating and cooling: A review
<b>B18</b>	Yue He	UCL	TBC
<b>B19</b>	Sara Alão	Cranfield University	Design and optimization of a novel ionic wind propulsion thruster
<b>B20</b>	Lydia Frumosu	Cranfield University	Plasma surface engineering of light weight materials for sustainable transport
<b>B21</b>	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
<b>B22</b>	Fanta Camara	University of York	TBC
<b>B23</b>	Olalekan Olatunji	Keele University	Determination of heavy metals in crude oil environment. A remediation approach
<b>B24</b>	Sam Stephenson	University of Cambridge	Systemic and societal change in UK Net Zero pathways and their implementation
<b>B25</b>	Poornima Kumar	University of Oxford	The systemic and climate impacts of digitalisation in daily life: a study of digital service acceptance in UK households

