
3rd BBNet Conference

Biorefining – Clean Growth – Net Zero

10-12 April 2024

Programme

Day 1: Wednesday 10th April

Time	Event	Abstract
11:00	Registration (Hotel Foyer)	
From 11:30	<i>Lunch</i> (Yard Restaurant)	
12:45	Welcome (Welcome and all sessions in City Suite B & C) <i>Neil Bruce, University of York</i>	
13:00	Session 1: Demonstrating the clean in 'clean growth' <i>Chair: Gavin Milligan, Green Knight Sustainability Consulting</i>	
13:05	What Net Zero means in practice <i>Carol Somper, JRP Solutions</i>	01
13:35	Making a success of your pitch – communicating biotech to the business world <i>Ed Robinson, Wells & Co</i>	02
14:05	Cleaner, greener retail – challenges and innovation <i>Moira Howie, Independent Adviser Diet, Health & Sustainability (former Nutrition and Health Manager at Waitrose and Partners)</i>	03
14:35	Panel discussion <i>Chair: Gavin Milligan</i> <i>Panel: Carol Somper, Ed Robinson, Andrew Fleming (Wells & Co), Moira Howie</i>	
15:00	<i>Coffee break</i> (City Suite Foyer)	
15:30	Session 2: Engineering biology for clean growth <i>Chair: Neil Bruce, University of York</i>	
15:30	Conversion of lignin to performance-advantaged bioproducts <i>Gregg Beckham, National Renewable Energy Laboratory (NREL)</i>	04
15:55	From systems biology to metabolic engineering of <i>Eubacterium limosum</i> B2 for the conversion of methanol and CO₂ to C4 chemicals <i>Philippe Soucaille, University of Toulouse</i>	05
16:20	Metabolic engineering of <i>Cupriavidus necator</i> H16 for the bioproduction of chemicals <i>Katalin Kovacs, University of Nottingham</i>	06
16:45	Government's Vision for Engineering Biology <i>India Higgins, Engineering Biology, DSIT</i>	07
17:00	Break – key collection (City Suite Foyer)	
18:30	Poster session and networking (City Suite Foyer)	
19:30	<i>Dinner</i> (City Suite A)	

Day 2: Thursday 11th April

09:00	Session 3: What is waste and why waste is not free <i>Chair: Christine Parry, AB Agri Ltd</i>	
09:05	The co-product market in the UK <i>Richard Evans, AB Agri Ltd</i>	08
09:30	Realising the true value of ‘wastes’ – linking resource recovery to food, energy, and the environment <i>Rebecca Wheeler, Future Biogas</i>	09
09:55	Waste valorisation at pilot scale <i>Mark Gronnow, Biorenewables Development Centre</i>	10
10:20	Flash presentations: Bioremediation of heavy metals using yeast: a comparative study of metal nanoparticle biosynthesis, characterization, and genetic contributions <i>Walid Omara</i>	P25
	SPLICE: Sustainable Processes Linked for an Integrated Circular Economy <i>Fatemeh Khodaparastan</i>	P28
10:30	<i>Coffee break (City Suite Foyer)</i>	
11:00	Session 4: Circular bioeconomy <i>Chair: Patricia Thornley, Aston University</i>	
11:05	Sustainable and inclusive bioenergy for rice growing communities in the Philippines <i>Rebecca Fothergill, Aston University</i>	11
11:30	Circular chemicals and the bioeconomy <i>Sarah Davidson, Croda Europe Ltd</i>	12
11:55	Sustainable feedstock <i>Anna Duden, Utrecht University</i>	13
12:20	Flash presentations: From lignocellulosic biomass to chemical wealth <i>Mauro Adriel Rinaldi</i>	P23
	Conversion of organic wastes into biodegradable plastics: a dual and synergistic solution in a circular economy <i>Yongqiang Liu</i>	P30
	HAROW and REvAR – fuel gases from organic-rich wastewaters <i>Malcolm Glendenning</i>	P36
12:30	<i>Lunch (Yard Restaurant)</i>	
14:00	Session 5: Challenge of scaling-up <i>Mark Gronnow, Biorenewables Development Centre</i>	
14:05	Technical and financial challenges in scaling up a bio-refinery using salmon waste <i>Kjartan Sandnes, Biomega</i>	14
14:30	Fermented products: design for manufacture <i>Andrew Ellis, Biocatalysts</i>	15
15:00	From lab to large scale: real-time insights and strategies in bioprocess scaling <i>Yvonne Armitage, CPI</i>	16
15:30	<i>Coffee break (City Suite Foyer)</i>	
16:00	Session 6: Seaweed biorefining <i>Chair: Leonardo Gomez, University of York</i>	
16:05	Research progress and knowledge gaps in seaweed cultivation and valorisation <i>Thierry Tonon, University of York</i>	17
16:25	Seaweed production in the UK: status, challenges and developments in aquaculture <i>Elisa Capuzzo, Cefas</i>	18
16:45	Flash presentation: Sustainable seaweed: analysing environmental impacts of production and use <i>Tom McMurray, Queens University Belfast</i>	P15

16:50	Sustainable packaging in the context of a seaweed biorefinery focused on biopolymeric materials <i>Erinc Bahcegul, Notpla Ltd.</i>	19
17:10	The Norwegian Seaweed Biorefinery Platform <i>Finn Lillelund Aachmann, NTNU Norwegian University of Science and Technology</i>	20
17:30	Break and informal networking time	
18:30	Poster session and networking (City Suite Foyer)	
19:30	<i>Dinner</i> (City Suite A)	

Day 3: Friday 12th April

9:00	Session 7: Policy for sustainable biorefineries <i>Chair: Joanna Sparks, Aston University</i>	
9:00	Interactive session exploring sustainability, biorefineries, and the role of policy	21
9:45	Session includes flash presentations: Geo-Specific Classification of Global Sugarcane Bagasse Production and Use <i>Maureen Okibe</i>	P33
	Enhancing sustainability in lignocellulosic biorefineries: enzymatic valorisation of xylan from residual plant biomass <i>Eleonora Campos</i>	P05
	Developing an alternative political bioeconomy in the UK <i>Dan Taylor</i>	P37
10:30	<i>Coffee break</i> (City Suite Foyer)	
11:00	Session 8: Research funded by BBNNet and other funding opportunities <i>Chair: Veronica Ongaro, Biome Bioplastics Limited</i>	
11:05	BBSRC support for the clean growth area <i>Colin Miles, BBSRC, UKRI</i>	22
11:20	Innovate UK support for sustainable bio-based materials and manufacture <i>Dana Heldt, Innovate UK Business Connect</i>	23
11:35	Demonstrating the production of circular biobased textiles <i>Alexandra Lanot, University of York</i>	24
11:50	Bioacrylic acid production from seaweed <i>Jonathan Todd, University of East Anglia</i>	25
12:05	Development of enzyme-based biotechnology to support the wool industry transition to a circular system <i>Jinsong Shen, De Montfort University</i>	26
12:20	MSAD: Methanosarcina Detection and Addition for Optimised Anaerobic Digestion <i>Samantha Cook</i>	P06
	Catalytic activity of Pulcherrimin: a green, natural, water-tolerant, and highly active heterogeneous biocatalyst for base-free 5-hydroxymethylfurfural oxidation <i>Jonathan Wagner</i>	P14
12:30	Closing remarks and end of meeting	