

PROGRAMME

SUNDAY 5th November 2017 - ARRIVAL AT ORCHARD HOTEL (Check-in from 14:00)		
19:00	Registration/Reception	Atrium - East Midlands Conference Centre (EMCC)
20:00	Dinner	Conference Theatre - EMCC
MONDAY 6th November 2017		
SESSION 1 - Chair: Rolf Thauer (Max Planck Institute, Germany) – Conference Theatre - EMCC		
09.00 – 09.05	Jacque/Nigel Minton <i>SBRC-Nottingham, UK</i>	Welcome
09.05 – 09:35	Volker Müller <i>Goethe-University Frankfurt, Germany</i>	INVITED TALK - How to Make a Living by producing Acetate from Carbon Dioxide and Hydrogen
09.35 – 09:55	Jonathan Baker <i>SBRC-Nottingham, UK</i>	Development and Application of Efficient Forward and Reverse Genetic Tools in <i>Acetobacterium woodii</i>
09:55 – 10:15	Noah Mesfin <i>Oxford Brookes University, UK</i>	Using A Metabolic Model of <i>Acetobacterium woodii</i> for Insights into its Utility for Biotechnological Purposes
10:15 – 10:35	Fabian Schwarz <i>Goethe University, Frankfurt, Germany</i>	Hydrogen Storage Using Acetogens as Biocatalysts: Hydrogen-Dependent CO ₂ -Reductase from a Thermophilic Acetogen
10:35 - 11:00	Coffee/Tea Break	Atrium - EMCC
Session 2 - Chair: Sean Simpson (Lanzatech, USA) – Conference Theatre EMCC		
11:00 – 11:30	Guido Saracco <i>Italian Institute of Technology (IIT), Italy</i>	INVITED TALK - Sustainable Chemical Production Ecosystems based on CO ₂ and Combined Photo-, Electro- and Biochemical Processes
11:30 – 11:50	Mahendra Raut <i>University of Sheffield, UK</i>	Optimizing the Hydrolysis Process by Pre-Composting to Enhanced Biomethane Production by Anaerobic Digestion from Lignocellulosic Waste
11:50 – 12:10	Nuri Azbar <i>Ege University, Turkey</i>	CO ₂ Utilisation via a Novel Anaerobic Bioprocess Configuration with Simulated Gas Mixture and Real Stack Gas Samples
12.10 – 12:30	Konstantinos Asimakopoulos <i>Technical University Denmark</i>	Assessment of Syngas Biomethanation by Mixed Microbial Consortia in a Trickle-bed Reactor
12:30 – 14:00	Lunch	Atrium - EMCC
Session 3 - Chair: David Fell (Oxford Brookes University, UK) – Conference Theatre - EMCC		
14:00 – 14:30	Sean Simpson <i>Lanzatech, USA</i>	INVITED TALK - Fuel and Chemical Production by Gas Fermentation at Scale
14:30 – 14:50	Stephen Wilkinson <i>University of Chester, UK</i>	Design and Analysis of Bioreactors for Maximum CO ₂ Capture and Utilisation
14:50 – 15:10	Jasbir Singh <i>HEL Ltd, UK</i>	Enhanced Process Economics of C1 Gas Fermentations Through Elevated Pressure Operation – Presentation of Principles and Application Data
15:10 – 15:30	Vera Salgado <i>SBRC-Nottingham, UK</i>	POC TALK - Exoelectrogenic Intensification of CO ₂ / H ₂ Fermentations using O ₂ as Final Electron Acceptor
15:30 - 16:00	PITCHES	Gerard Gardener (HEL Ltd) Andrew Goddard (Freeland Horticulture Ltd) Alex Finney (University of Dundee) Lucy Montgomery (National Non-Food Crops Centre) Koen Quataert (Bio Base Europe Pilot Plant) Steve Skill (Greenskill Ltd)
16:00 – 18:00	POSTERS/ Refreshments	Atrium - EMCC
18:00 – 19:30	Management Board meeting	MB only – Meeting Room (TBC) Orchard Hotel
20:00	Dinner	Conference Theatre - EMCC

TUESDAY 7th November 2017		
Session 4 - Chair: Tithira Wimalasena (Calysta UK Ltd) – Conference Theatre EMCC		
09.00 – 09:30	Linsey Garcia-Gonzalez <i>VITO NV, Belgium</i>	INVITED TALK - Carbon Capture and Utilization (CCU) in Flanders: current status, challenges and way forward
09.30 – 09:50	Karel De Winter <i>Bio Base Europe Pilot Plant, Belgium</i>	A Key Role for Shared Pilot Facility to Deploy Gas Fermentation
09:50 – 10:10	Thomas Smith <i>Sheffield Hallam University, UK</i>	Developing obligate aerobic methanotrophs for biotechnology
10:10– 10:30	Robert Manfield <i>SBRC-Nottingham, UK</i>	POC TALK - <i>Eubacterium limosum</i> : Maximising reaction productivity through protein scaffolding with cohesion-dockerin domains
10:30 – 11:00	Coffee/Tea Break	Atrium - EMCC
Session 5 - Chair: Edward Green (Chain Biotech, UK) – Conference Theatre EMCC		
11:00 – 11:30	Alexander Steinbüchel <i>University of Münster, Germany</i>	INVITED TALK - <i>Ralstonia eutropha</i> as production strain utilizing CO ₂ and CO.
11:30 – 11:50	Dirk Holtman <i>Dechema - Forschungs Institut, Germany</i>	Expanding the Product Spectrum of Microbial Electrosynthesis – Engineering of <i>Cupriavidus necator</i> to produce the Sesquiterpenoid α -Humulene from CO ₂
11:50 – 12:10	Anne Henstra <i>SBRC-Nottingham, UK</i>	Transcriptional Changes Underpinning Shifts In Acetate, Ethanol, 2,3 Butanediol And Lactate Ratios In Gas Fermentation By <i>Clostridium autoethanogenum</i>
12:10 – 12:30	Rupert Norman <i>SBRC-Nottingham, UK</i>	Construction and Analysis of a Genome-Scale Metabolic Model of <i>Clostridium autoethanogenum</i>
12:30 – 14.00	Lunch	Atrium - EMCC
Session 6 - Chair: Nigel Minton (SBRC-Nottingham, UK) – Conference Theatre EMCC		
14:00 – 14:30	Christopher Brigham <i>University of Massachusetts, Dartmouth, USA</i>	INVITED TALK - Autotrophic <i>Ralstonia eutropha</i> : going “under the bonnet” of a microbial chassis to deliver multiple bioproducts
14:30 – 14:50	Christian Arenas <i>SBRC-Nottingham, UK</i>	The Genetic Basis of 3-Hydroxypropanoate Metabolism in <i>Cupriavidus necator</i> H16
14:50 – 15:10	Frank Sargent <i>University of Dundee, UK</i>	POC TALK - Hydrogen-dependent CO ₂ reduction by <i>Escherichia coli</i>
15:10 – 15:30	Samantha Bryan <i>SBRC-Nottingham, UK</i>	Engineering Improved Ethylene Production in <i>Cupriavidus</i>
15:30 – 15:45	Nigel Minton <i>SBRC-Nottingham, UK</i>	Wrap up and Next Steps
15:45 - 17:00	Refreshments/ Depart	Atrium - EMCC

POC TALKS – These are oral presentations by the recipients of BBSRC-NIBB C1net “Proof of Concept” funding.