




DRAFT TIMETABLE


Day 1, Tuesday 13th November


| | BURY THEATRE | ROYAL ARMOURIES HALL A&B | WELLINGTON SUITE- 1 ST FLOOR |
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| 09.30 – 09.55 | <p>PLENARY: Understanding and manipulating microbial communities in AD Chong, J., Royal Society Industry Fellow & Senior Lecturer in Microbiology, University of York, UK Chair: Martin Jolly, Aqua Enviro</p> | | |
| | <p>ADVANCES IN ANAEROBIC DIGESTION Chair: Martin Jolly, Aqua Enviro Sponsored by</p>   | <p>CIRCULAR ECONOMY Chair: Fiona Nicholson, ADAS Sponsored by</p>  | <p>MODELLING & SOFTWARE DEVELOPMENTS Chair: Maryam Kabir, Aqua Enviro</p> |
| 10.00 – 10.25 | <p>SAS only thermal hydrolysis with series digestion – project results confirm lab predictions Shana, A.¹, Fountain, P.¹, Christie, I.¹, Panter, K.², ¹Thames Water, UK, ²Cambi, UK</p> | <p>Biosolids and biogenic fertilisers: converting wishful thinking to reality Whipps, A.¹ and Hammond, A.², ¹Pell Frischmann Ltd, UK, ²CCm Technologies Ltd, UK</p> | <p>Critical assessment and optimisation of sewage sludge mesophilic anaerobic digestion processes at operational wastewater treatment plant Liu, J. and Smith, S.R., Imperial College London, UK</p> |
| 10.25 – 10.50 | <p>Biodegradability of filtrate from thermally hydrolysed waste activated sludge Toutian, V.^{1,2*}, Barjenbruch, M.¹, Unger, T.¹, Loderer, C.², Remy, C.², ¹Technical University of Berlin, Germany, ²Berlin Centre of Competence for Water, Germany</p> | <p>EuPhoRe® – An advanced process for the disposal of sewage sludge with co-current recovery of phosphates Hazard, B.¹, Zepke, F.², Jabornig, S.³, Wutscher, K.³, ¹Trant Engineering Ltd, UK, ²EuPhoRe GmbH, Germany, ³SFC Umwelttechnik GmbH, Austria</p> | <p>Aquasuite® MINE – the advanced and optimal control of sludge treatment Koornneef, E., van Eijden, R. and Visser, A., Royal HaskoningDHV, The Netherlands</p> |
| 10.50 – 11.15 | <p>FOG and food waste receiving and processing considerations before digestion Williams, T.O., Gabel, D., Robillard, D., Jacobs, USA</p> | <p>Beyond nutrient recovery – what else can we recover from biosolids? Georges, K., Antizar, B., Serra, E., Uku, B., Isle Utilities, UK</p> | <p>Hustle and Flow: An approach to advanced analytics and proper production planning in bioresources Oosthuizen, S.¹, Cotterill, M.², Riches, S.², ¹Business Modelling Associates UK, ²Anglian Water, UK</p> |
| 11.15 – 11.45 | <p>Morning coffee/ tea break</p> | | |
| 11.45 – 12.10 | <p>HpH advanced anaerobic digestion – a review of five years operation and lessons learnt</p> | <p>Rashca™: A new robust process for the conversion of digested sewage sludge and sludge screenings to liquid biofuel</p> | <p>Full scale validation of a model to predict anaerobic digester performance</p> |

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| | Riches, S. and Brookes, A., Anglian Water Services Ltd, UK | Sirovski, F. and Sharpe, D., Industrial Chemicals Ltd, UK | Oxtoby, S. ^{1,2} , Winter, P. ¹ , Smith, S.R. ² , ¹ Thames Water, UK, ² Imperial College London, UK |
| 12.10 – 12.35 | Comparing the performance of thermophilic and mesophilic anaerobic digestion of pasteurised sewage sludge Hill, S., Shana, A., Perez, E.R., Fountain, P., Thames Water, UK | Catalytic slow pyrolysis of biosolids in a bubbling fluidised bed reactor using lime, biochar and activated char Patel, S. ¹ , Kundu, S. ¹ , Halder, P. ¹ , Paz-Ferreiro, J. ¹ , Surapaneni, A. ² , Shah, K. ¹ , ¹ MIT University, Australia, ² South East Water, Australia | BioWin modelling to develop strategies to maximise energy generation from seven of Anglian Water's sludge treatment centres Smyth, M. ¹ , Kabir, M. ¹ , Inman, D. ² , ¹ Aqua Enviro, UK, ² Anglian Water, UK |
| 12.35 – 13.00 | Advanced sludge digestion optimisation – introducing innovative Ephyra® technology Visser, A., Koornneef, E., Traksel, D., Royal HaskoningDHV, Netherlands | Enzyme recovery from waste activated sludge Smith, S.R. and Liu, Z., Imperial College London, UK | Optimising bioresources businesses through masterplanning Hughes, S., and Horne, P., United Utilities |
| 13.00 – 14.00 | Lunch break | | |
| | ADVANCES IN ANAEROBIC DIGESTION cont. Chair: Angela Bywater, AD Network | CIRCULAR ECONOMY cont. Chair: Alan Whipps, Pell Frischmann | BIOGAS AND ENERGY MANAGEMENT Chair: Prof Stephen Smith, Imperial College London (14.25 start) |
| 14.00 – 14.25 | Methane producing bacteria in the Northern hemisphere Curtis, T., Newcastle University, UK | Enabling a circular economy by recovering commodity products from sludge Williams, T.O. and Jeyanayagam, S., Jacobs, USA | |
| 14.25 – 14.50 | New additive to aid digestion of recalcitrant crop fibres Gemmell, N.S., Clayton Hall Farm Biogas Products Ltd, UK | RE-DIRECT - Regional development and integration of unused biomass wastes as resources for circular products and economic transformation Wilcox Brooke, A., Severn Wye Energy Agency, UK | Demand-driven biogas production from anaerobic digestion of sewage sludge: preliminary experimental results Lafretta, M. ^{1,2} , Thorpe, R.B. ¹ , Ouki, S.K. ¹ , Lee, J. ¹ and Rus Perez, E. ² , ¹ University of Surrey, UK, ² Thames Water Utilities Ltd, UK |
| 14.50 – 15.15 | GHG impacts of food waste AD and sludge AD Harrison, D., and Theodoulou, M., Suez Water Technologies and Solutions | The importance of anaerobic digestion within the MSW based biorefinery – Fiberight Puri, D., Fiberight Ltd, UK | Flexibility potential of waste water treatment plants with anaerobic sludge stabilisation Hobus, I., Kolisch, G., Pyro, P., Wupperversandsgesellschaft für integrale Wasserwirtschaft mbH, Germany |
| 15.15 – 15.45 | Afternoon tea / coffee break | | |
| 15.45 – 16.10 | PANEL DISCUSSION: How close are we to tailoring microbial communities in AD? | Economic optimization of integrated nutrient and energy recovery treatment trains using a new model library | Energy recovery from biogas Blanchard, R., Loughborough University, UK |

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| | Led by: David Inman, Anglian Water James Chong, York University Tom Curtis, Newcastle University Angela Bywater, BBSRC AD Network | Vaneckhaute, C. ¹ and Belia, E. ² , ¹ Bioengine, Université Laval, Canada, ² Primodal Inc., Canada | |
| 16.10 – 16.35 | | Export of upgraded biosolids to emerging markets in Asia Ugland, T. ¹ and Nguyen, V. ² , ¹ HØST Valuable Waste AS, Norway, ² HØST Asia Ltd, Vietnam | The ATC Plant at Lower Brighouse – A merchant plant model for life after Water 2020 Pitt, D., Enertecgreen Limited, UK |
| 16.35 – 17.00 | | | |

Day 2, Wednesday 14th November

| | BURY THEATRE | ROYAL ARMOURIES HALL A&B | WELLINGTON SUITE- 1 ST FLOOR |
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| 09.00 – 09.25 | PLENARY: Come in, number two – your time is up. Are microplastics the beginning of the end for ‘sludge to land’? Tompkins, D. ¹ and Bungay, S. ² , ¹ Aqua Enviro, UK, ² Helix Environmental Consultancy Ltd, UK | | |
| | PRE / POST-TREATMENT AND THICKENING / DEWATERING Chair: Paul Fountain, Thames Water Sponsored by: SEEPEX. ALL THINGS FLOW | LANDBANK SECURITY Chair: Steve Bungay, Helix Environmental Consultancy Ltd | MAKING THE BIOECONOMY WORK Chair: Lucy Hopwood, NNFCC  |
| 09.30 – 09.55 | ANAMMOX for side-stream treatment of wastewater effluent Field, J. ¹ , Sierra, R. ¹ , Prevatt, J. ² , Foster, A. ³ , Ikner, L. ³ , Pepper, I. ³ , ¹ University of Arizona, Department of Chemical & Environmental Engineering, ² Pima County Regional Wastewater Reclamation Department, ³ University of Arizona, Water & Energy Sustainable Technology (WEST) Center, USA | A survey of UK sewage sludge quality: a contemporary and historical analysis Liu, S. ¹ , Liu, J. ¹ , Macedo, F. ² and Smith, S.R. ¹ , ¹ Imperial College London, UK, ² Thames Water Utilities Ltd, UK | Introduction to the Bioeconomy and BioBase4SME Montgomery, L., NNFCC |
| 09.55 – 10.20 | Nitrogen Removal on anaerobic digestion rejects from a THP-AD pretreatment by deammonification. Experiences in Lagares WWTP Oller M., GS INIMA, Spain | Emerging contaminants: a perspective from outside Europe Ball, A., RMIT University, Australia | |

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| 10.20 – 10.45 | How sludge characteristics and THP affect dewaterability Kjørlaug, O. ¹ , Rus, E. ² , Molokwu, O. ² , Nilsen, P.J. ¹ , ¹ Cambi Group AS, Norway, ² Thames Water Innovation, UK | Presence of emerging contaminants in treated sludges and their potential impact on the environment Healy, M., National University of Ireland, Galway, Ireland | The importance of AD in the Waste Bio-refinery Puri, D., Fiberight |
| 10.45 – 11.15 | Morning coffee / tea break | | |
| 11.15 – 11.40 | Sludge Pre-Treatment with OREGO SLG Benamor, H. and Whittle, I., Wessex Water, UK | Gaining efficiency & facilitating compliance in biosolids operations and reuse O’Riain, G., Compass Informatics, UK/Ireland | Advanced fuel production from food processing waste tbc |
| 11.40 – 12.05 | Energy and Process Efficiency - savings at Thames Water Lambert, S. ¹ and Fountain, P. ² , ¹ SEEPEX UK Ltd, UK, ² Thames Water, UK | Biosolids Assurance Scheme – maintaining confidence in biosolids recycling to agricultural land in the UK Llewellyn, A., Director of Assured Biosolids Ltd | On-site AD and the Circular Economy Gueterbock, R., Clearfleau |
| 12.05 – 12.30 | Twelve months on – Flottweg’s Xelleter decanter centrifuge proves it’s worth Steiger, W., Flottweg SE, Germany | Potential transfers of organic contaminants to the human foodchain from agricultural use of biosolids and other waste materials Smith, S.R and Rigby, H., Imperial College Consultants Ltd, UK | Treating complex wastes Kerr, S., Advanced Microwave Technologies Ltd |
| 12.35 – 12.40 | Student & early career professionals’ poster award presentation – sponsored by: | | |
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| 12.40 – 13.30 | Lunch break | | |
| | PRE / POST-TREATMENT AND THICKENING / DEWATERING cont. Chair: Keith Panter, Cambi UK | LANDBANK SECURITY cont. Chair: David Tompkins, Aqua Enviro | MAKING THE BIOECONOMY WORK cont. Chair: Lucy Hopwood, NNFCC |
| 13.30 – 13.55 | Polymer split-dosing trial for optimising the dewatering of thermally hydrolysed digested sludge at Long Reach Sewage Treatment Works Tilahun, D., Rus, E., Fountain, P., Christie, I., Thames Water Utilities Limited, UK | A method for the characterization of microplastics in biosolids Campo, P., Holmes, A. and Coulon, F., Cranfield Water Science Institute, Cranfield University, UK | Novel Business Models – Agrocycle Hopwood, L., NNFCC |
| 13.55 – 14.20 | Concerned about Biosolid cooling after THP? Not with Biosolid Flash Cooler Hilstrøm, T., Haarslev Industries A/S, Denmark | Land spreading options for non-source segregated organics – present landbank restrictions and future possibilities | Refining seafood mortalities with a thermophilic aerobic system Clark, P., PRM |

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| | | Ash, C. ¹ , Wheeler, R. ¹ , Whyatt, P. ¹ and Bullock, S. ² , ¹ 4R Group, UK ² Renewi plc, UK | |
| 14.20 – 14.45 | Reducing greenhouse gas emissions and improving sludge dewaterability with vacuum degassing of digested sludge Cadavid, G. ¹ , Dittmann, M. ¹ , O'Brien, L. ² , ¹ ELIQUO WATER GROUP GmbH, ² ELIQUO HYDROK LTD | Nanoparticles in biosolids and risks to landbank Hough, R., The James Hutton Institute, Scotland | Bio-Bean – novel multi-faceted business model Porter, J., bio-bean Ltd |
| 14.45 – 15.15 | Afternoon tea / coffee | | |
| 15.15 – 15.40 | Bio-cage™: A Novel innovative low-cost solution for sludge thickening – results from 52 Southern Water Sites Veesam, M ¹ and Thomas, P. ² , ¹ Southern Water, UK, ² AFECO, UK | Community impacts of land application Duckett, D., The James Hutton Institute, Scotland | Bioplastics – a development and commercial journey Moeyersons, M., Biome Technologies |
| 15.40 – 16.05 | The significance of direct dewatering of thin sludge to cake by VOLUTE dewatering press Mannion, R., Evergreen Water Solutions, UK | PANEL DISCUSSION: How can we best ensure a sustainable land bank? Led by: David Tompkins, Aqua Enviro <ul style="list-style-type: none"> • Stephen Smith, Imperial College London • Dominic Duckett, The James Hutton Institute • Steve Bungay, Helix Environmental Consultancy Ltd • Mark Healy, National University of Ireland | Anaerobic Digestion – a new market for Abagri Lee, N., Amur Energy |
| 16.05 – 16.30 | DfMA sludge thickening solutions – S-DISC takes a spin on Nereda sludge Sims, J., Huber Technology, UK | | New additive to aid digestion of recalcitrant crop fibres Gemmell, N., Clayton Hall Biogas Products Ltd |
| 16.30 – 16.45 | CLOSING SESSION Steve Bungay, Helix Environmental Consultancy Ltd | | |
| 16.45 – 17.00 | Site visits preparation talk Maryam Kabir, Aqua Enviro | | |

Supporting Organisations

