European Biosolids and Organic Resources Conference

DRAFT TIMETABLE

AquaEnviro

CIWEM Chartered Institution of Water and Environmental Management
Accredited Course

Day 1, Tuesday 13th November

	BURY THEATRE	ROYAL ARMOURIES HALL A&B	WELLINGTON SUITE- 1ST FLOOR
09.30 – 10.00	**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**		
	ADVANCES IN ANAEROBIC DIGESTION **Chair: Martin Jolly, Aqua Enviro** Sponsored by AD NETWORK Harnessing Anaerobic Digestion	**CIRCULAR ECONOMY** **Chair: Fiona Nicholson, ADAS**	**MODELLING & SOFTWARE DEVELOPMENTS** **Chair:**
10.00 – 10.25	**SAS only thermal hydrolysis with series digestion – project results confirm lab predictions** Shana, A.[1], Fountain, P.[1], Christie, I.[1], Panter, K.[2], [1]Thames Water, UK, [2]Ebcor Ltd, UK	**Biosolids and biogenic fertilisers: converting wishful thinking to reality** Whipps, A.[1] and Hammond, A.[2], [1]Pell Frischmann Ltd, UK, [2]CCm Technologies Ltd, UK	**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
10.25 – 10.50	**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], [1]Technical University of Berlin, Germany, [2]Berlin Centre of Competence for Water, Germany	**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], [1]Trant Engineering Ltd, UK, [2]EuPhoRe GmbH, Germany, [3]SFC Umwelttechnik GmbH, Austria	**Aquasuite® MINE – the advanced and optimal control of sludge treatment** Koornneef, E., van Eijden, R. and Visser, A., Royal HaskoningDHV, The Netherlands
10.50 – 11.15	**FOG and Food Waste Receiving and Processing Considerations Before Digestion** Williams, T.O., Jacobs, USA	**Beyond nutrient recovery – what else can we recover from biosolids?** Georges, K., Antizar, B., Serra, E., Uku, B., Isle Utilities, UK	**Hustle and Flow: Product lifecycle management of biosolids** Oosthuizen, S.[1] and Riches, S.[2], [1]Business Modelling Associates UK, [2]Anglian Water, UK
11.15 – 11.45	**Morning coffee/ tea break**		
11.45 – 12.10	**HpH advanced anaerobic digestion – a review of five years operation and lessons learnt** Riches, S. and Brookes, A., Anglian Water Services Ltd, UK	**Rashca™: a new robust process for the conversion of digested sewage sludge and sludge screenings to liquid biofuel** Sirovski, F. and Sharpe, D., Industrial Chemicals Ltd, UK	**Full scale validation of a model to predict anaerobic digester performance** 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]RMIT University, Australia, [2]South East Water, Australia	**Maximising energy generation from Anglian Water's Sludge Treatment Centres: Improving the total energy content and available energy of the feedstock** Smyth, M.[1], Kabir, M.[1], Inman, D., [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, The 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**		
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	**Digitizing bioresources, utilising the latest advances in machine learning and AI to unlock the true potential bioresources for both TOTEX and performance** Harrison, D. and Christian, S., Suez Water Technology & Solutions
14.25 – 14.50	**New additive to aid digestion of recalcitrant crop fibres** Gemmell, N.S., Clayton Hall Farm Biogas Products Ltd, UK	**The organic waste gold rush: optimising resource recovery in the UK bioeconomy** Marshall, R. University of Lancaster, UK	**BIOGAS AND ENERGY MANAGEMENT** **Chair:** **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	**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	**Flexibility potential of waste water treatment plants with anaerobic sludge stabilisation** Hobus, I., Wupperverbandsgesellschaft 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?**	**The importance of anaerobic digestion within the MSW based bio-refinery – Fiberight** Puri, D., Fiberight, UK	**Energy recovery from biogas** Blanchard, R., Loughborough University, UK

16.10 – 16.35		**Economic optimization of integrated nutrient and energy recovery treatment trains using a new model library** Vaneeckhaute, C.[1], Belia, E.[2], Vanrolleghem, P.A.[3], [1]Bioengine, Université Laval, Canada, [2]Primodal Inc., Canada, [3]model*EAU*, Université Laval, Canada	**Boosting biogas generation by 20-30% using biocatalytic augmentation of anaerobic digesters** Fabiyi, M., Conley, S., Drylet, LLC, USA
16.35 – 17.00		**Export of upgraded biosolids to emerging markets in Asia** Ugland, T. HØST Valuable Waste AS, Norway	**The ATC Plant at Lower Brighouse – A merchant plant model for life after Water 2020** Pitt, D., Enertecgreen Limited, UK

Day 2, Wednesday 14th November

	BURY THEATRE	ROYAL ARMOURIES HALL A&B	WELLINGTON SUITE- 1ST FLOOR
09.00 – 09.30	**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 **Chair:**		
	PRE / POST-TREATMENT AND THICKENING / DEWATERING Sponsored by: SEEPEX. ALL THINGS FLOW **Chair:**	**LANDBANK SECURITY** **Chair: Steve Bungay, Helix Environmental Consultancy Ltd**	**WORKSHOP: "MAKING THE BIOECONOMY WORK"** **Chair: Lucy Hopwood, NNFCC**
09.30 – 09.55	**Evaluation of Anammox Batch Reactors** Pepper, I. and Foster, A., Water & Energy Sustainable Technology (WEST) Center, The University of Arizona, 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** Lucy Montgomery, NNFCC
09.55 – 10.20	**Nitrogen Removal on anaerobic digestion rejects from a THP-AD pretreatment by deammonification. Experiences in Lagares WWTP** Oller Balcells, M., GS INIMA Environment, Spain	**Emerging contaminants: a perspective from outside Europe** Ball, A., RMIT University, Australia	**BioBase4SME project** Lucy Montgomery, NNFCC
10.20 – 10.45	**How sludge characteristics and THP affect dewaterability**	**Findings of the Irish EPA study on emerging contaminants in sewage sludge** Healy, M., National University of Ireland, Galway, Ireland	**Fuels/chemicals from recyclate** Dhivya Puri, Fiberight

	Kjørlaug, O.[1], Rus, E.[2], Molokwu, O.[2], Nilsen, P.J.[1], [1]Cambi Group AS, Norway, [2]Thames Water Innovation, UK		
10.45 – 11.15	**Morning coffee / tea break**		
11.15 – 11.40	**Sludge Pre-Treatment with OREGE SLG** Benamor, H. and Whittle, I., Wessex Water, UK	**Gaining efficiency & facilitating compliance in biosolids operations and reuse** O'Riain, G., Compass Informatics, Ireland	**Advanced fuels/chems from MSW** TBC
11.40 – 12.05	**Energy and Process Efficiency - savings at Thames Water** McGarian, P.[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	**Single cell proteins from waste** Calysta
12.05 – 12.30	**Twelve months on – Flottweg's Xelletor decanter centrifuge proves its 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** Sam Kerr, Advanced Microwave Technologies Ltd
12.35 – 12.40	**Student & early career professionals' poster award presentation**		
12.40 – 13.30	**Lunch break**		
	PRE / POST-TREATMENT AND THICKENING / DEWATERING CONT. **Chair:**	**LANDBANK SECURITY CONT.** **Chair: David Tompkins, Aqua Enviro**	**WORKSHOP: "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	**Business Models – Agrocycle** Lucy Hopwood, 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** Ash, C.[1], Wheeler, R.[1], Whyatt, P.[1] and Bullock, S.[2], [1]4R Group, UK [2]Renewi, UK	**Novel approach to developing a waste-solution** Paul Clark, PRM

14.20 – 14.45	**Reducing greenhouse gas emissions and improving sludge dewaterability with vacuum degassing of digested sludge** Cadavid, G., Dittmann, M., O'Brien, L., Eliquo Water Group, UK	**Nanoparticles in biosolids and risks to landbank** Hough, R., The James Hutton Institute, Scotland	**Bio-Bean – novel multi-faceted business model** George May, Bio-Bean
14.45 – 15.15	**Afternoon tea / coffee**		
15.15 – 15.40	**Bio-cage™, A Novel innovative low-cost solution for sludge thickening – Results from 40 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	**Small scale AD suitable for UK** TBC
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?**	**Optimising AD (feedstock/additives/bullet-BMP)** Nigel Lee, Amur Energy
16.05 – 16.30	**DfMA sludge thickening solutions – S-DISC takes a spin on Nereda sludge** Sims, J., Huber Technology, UK		**Additive to increase productivity** Neil Gemmell, Clayton Hall Biogas Products Ltd
16.30 – 16.45	**CONFERENCE CLOSE** Steve Bungay, Helix Environmental Consultancy Ltd		
16.45 – 17.00	**Site visits preparation talk** Maryam Kabir, Aqua Enviro		

Supporting Organisations

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