

EUROPEAN BIOSOLIDS & ORGANIC RESOURCES

CONFERENCE & EXHIBITION

13-14 NOV 2018, ROYAL ARMOURIES, LEEDS

DAY 1 – TUESDAY 13TH NOVEMBER

PLENARY

Understanding and manipulating microbial communities in AD

Chong, J., Royal Society Industry Fellow & Senior Lecturer in Microbiology, University of York, UK

ADVANCES IN ANAEROBIC DIGESTION

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, ²Ebcor Ltd, UK

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

Bioresources digestion

Williams, T.O., Jacobs, USA

HpH advanced anaerobic digestion – a review of five years operation and lessons learnt

Riches, S. and Brookes, A., Anglian Water Services Ltd, UK

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

Advanced sludge digestion optimisation – introducing innovative Ephyra® technology

Visser, A., Koornneef, E., Traksel, D., Royal HaskoningDHV, The Netherlands

Methane producing bacteria in the Northern hemisphere

Curtis, T., Newcastle University, UK

Molybdate-stimulated methanogenesis by salt-tolerant microbial community in anaerobic digestion of high salt and sulphate-rich wastewater

Amekan, Y., Pander, B., Redeker, K., Chong, J., University of York, UK

New additive to aid digestion of recalcitrant crop fibres

Gemmell, N.S., Clayton Hall Farm Biogas Products Ltd, UK

Novel probiotic solutions for sewage sludge

Keenan, M., EKOGEA UK Ltd and EKO GEA, Slovenia

PANEL DISCUSSION: How close are we to tailoring microbial communities in AD?

CIRCULAR ECONOMY

Biosolids and biogenic fertilisers: converting wishful thinking to reality

Whipps, A.¹ and Hammond, A.², ¹Pell Frischmann Ltd, UK, ²CCm Technologies Ltd, UK

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

Beyond nutrient recovery – what else can we recover from biosolids?

Georges, K., Antizar, B., Serra, E., Uku, B., Isle Utilities, 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

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, ¹RMIT University, Australia, ²South East Water, Australia

Enzyme recovery from waste activated sludge

Smith, S.R. and Liu, Z., Imperial College London, UK

Enabling a circular economy by recovering commodity products from sludge

Williams, T.O. and Jeyanayagam, S., Jacobs, USA

The organic waste gold rush: optimising resource recovery in the UK bioeconomy

Marshall, R. University of Lancaster, 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

The importance of anaerobic digestion within the MSW based bio-refinery – Fiberight

Puri, D., Fiberight, UK

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, ¹Bioengine, Université Laval, Canada, ²Primodal Inc., Canada, ³modelEAU, Université Laval, Canada

MODELLING & SOFTWARE DEVELOPMENTS

A whole-community biosolids management based on advanced digestion

Liao, Z.¹, Wu, X.², Kleiven, M.¹ and Deng, D.¹, ¹Cambi Group AS, Norway, ²China National Environmental Protection Group, China

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

Aquasuite® MINE – the advanced and optimal control of sludge treatment

Koornneef, E., van Eijden, R. and Visser, A., Royal HaskoningDHV, The Netherlands

Hustle and Flow: Product lifecycle management of biosolids

Oosthuizen, S.¹ and Riches, S.², ¹Business Modelling Associates UK, ²Anglian Water, UK

Full scale validation of a model to predict anaerobic digester performance

Oxtoby, S.^{1,2}, Winter, P.¹, Smith, S.R.², ¹Thames Water, UK, ²Imperial College London, UK

Maximising energy generation from Anglian Water's Sludge Treatment Centres: Improving the total energy content and available energy of the feedstock

Smyth, M and Kabir, M., Aqua Enviro, UK

Additional speakers have been invited to share their work on the application of models to planning for AMP 7

BIOGAS AND ENERGY MANAGEMENT

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, ¹University of Surrey, UK, ²Thames Water Utilities Ltd, UK

Flexibility potential of waste water treatment plants with anaerobic sludge stabilisation

Hobus, I., Wupperverbandsgesellschaft für integrale Wasserwirtschaft mbH, Germany

Energy recovery from biogas

Blanchard, R., Loughborough University, UK

Boosting biogas generation by 20-30% using biocatalytic augmentation of anaerobic digesters

Fabiyi, M., Conley, S., Drylet, LLC, USA

The ATC Plant at Lower Brighthouse – A merchant plant model for life after Water 2020

Pitt, D., Enertecgreen Limited, UK

Additional speakers have been invited to share their work on in-situ biogas upgrading

DAY 2 – WEDNESDAY 14TH NOVEMBER

PRE / POST-TREATMENT AND THICKENING / DEWATERING

How sludge characteristics and THP affect dewaterability

Kjørlaug, O.¹, Rus, E.², Molokwu, O.², Nilsen, P.J.¹, ¹Cambi Group AS, Norway, ²Thames Water Innovation, UK

Sludge Pre-Treatment with OREGÉ SLG

Benamor, H. and Whittle, I., Wessex Water, UK

Energy and Process Efficiency - savings at Thames Water

McGarian, P.¹ and Fountain, P.², ¹SEEPEX UK Ltd, UK, ²Thames Water, UK

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

Concerned about Biosolid cooling after THP? Not with Biosolid Flash Cooler

Hilstrøm, T., Haarslev Industries A/S, Denmark

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

Twelve months on – Flottweg's Xelletor decanter centrifuge proves its worth

Steiger, W., Flottweg SE, Germany

Bio-cage™, A Novel innovative low-cost solution for sludge thickening – Results from 40 Southern Water Sites

Veesam, M., Southern Water, UK

The significance of direct dewatering of thin sludge to cake by VOLUTE dewatering press

Mannion, R., Evergreen Water Solutions, UK

DfMA sludge thickening solutions – S-DISC takes a spin on Nereda sludge

Sims, J., Huber Technology, UK

Evaluation of Anammox Batch Reactors

Pepper, I. and Foster, A., Water & Energy Sustainable Technology (WEST) Center, The University of Arizona, USA

Nitrogen Removal on anaerobic digestion rejects from a THP-AD pretreatment by deammonification. Experiences with DEMON Lagares WWTP

Oller Balcells, M., GS INIMA Environment, Spain

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, ¹Aqua Enviro, UK, ²Helix Environmental Consultancy Ltd, UK

LANDBANK SECURITY

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, ¹Imperial College London, UK, ²Thames Water Utilities Ltd, UK

Emerging contaminants: a perspective from outside Europe

Ball, A., RMIT University, Australia

Findings of the Irish EPA study on emerging contaminants in sewage sludge

Healy, M., National University of Ireland, Galway, Ireland

Gaining efficiency & facilitating compliance in biosolids operations and reuse

O'Riain, G., Compass Informatics, Ireland

Biosolids Assurance Scheme – maintaining confidence in biosolids recycling to agricultural land in the UK

Grieve, D., Grieve Strategic, UK

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

A method for the characterization of microplastics in biosolids

Campo, P., Holmes, A. and Coulon, F., Cranfield Water Science Institute, Cranfield University, UK

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, ¹4R Group, UK ²Renewi, UK

Additional speakers have been invited to share work on: re-growth of indicator organisms during biosolids' storage; odour control and management; nanoparticles in biosolids

PANEL DISCUSSION: How can we best ensure a sustainable land bank?

WORKSHOP: “MAKING THE BIOECONOMY WORK”

In collaboration with the NNFCC, this full day session will explore how businesses have moved from theory to commercial reality – to bring the bioeconomy to life. Visit www.european-biosolids.com for updates.

Supporting Organisations

