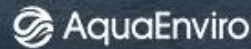


EUROPEAN BIOSOLIDS & ORGANIC RESOURCES CONFERENCE AND EXHIBITION 19 - 20 NOVEMBER 2019, MANCHESTER, UK



DAY 1 – TUESDAY 19TH NOVEMBER

ADVANCES IN ANAEROBIC DIGESTION

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

Genomics orchestration surpasses biochemical limitations for a new renaissance in anaerobic digestion

Lee, P-H., Imperial College London, UK

How to Transition from conventional MAD to THP digestion; experiences from Basingstoke

Merry, J.¹ and Fountain, P.², ¹Stantec, UK, ²Thames Water, UK

The effects of thermal hydrolysis and ammonia concentration on digestion rates at Basingstoke STW.

Searching for the sweet spot

Panter, K.¹, Fountain, P.², Shana, A.², ¹Cambi, UK, ²Thames Water, UK

Operating a three-staged thermophilic anaerobic digestion facility

Parry, D.¹, Sela, Y.², Rabinowitz, B.¹, Clark, C.¹, ¹Jacobs, USA ²Mey Ezor Dan, Israel

Unravelling the Ephyra sludge digestion technology

Koornneef, E., Visser, A., Hendriks, A., Royal HaskoningDHV, The Netherlands

BIOGAS MANAGEMENT

Gastop, optimization of the design of anaerobic digestion with reduced safety area and quality of the biogas produced

Simonsen, N.¹, Bigot, B.², Kjaer, R.¹, ¹Krøger A/S, Denmark, ²Veolia Water Solutions & Technologies, UK

Full-scale digester micro-aeration studies to improve biogas quality

Kraakman, B.^{1,2}, Diaz, I.², Muñoz, R.², ¹Jacobs, UK, ²Institute of Sustainable Processes, University of Valladolid, Spain

Energy production from biogas: responding to current and future opportunities

Horne, P, Richards, S., Pogson, J., Pennick, A., United Utilities, UK

AMMONIA MANAGEMENT

The role of ammonia stripping in the enhancement of anaerobic digestion

Eden, R.¹, Moulden, M.¹, Richardson, K.¹, Thomas, T.², ¹Organics Ltd, UK ²University of Warwick, UK

Operational experience with treatment of THP-MAD sidestream liquors with the ANAMMOX®-process

Driessen, W.¹, Veldhoven, J.T.A.², Janssen, M.², Hobbs, E.³, Went, Ch.³, ¹Paques bv, The Netherlands, ²Waterschap De Dommel, The Netherlands, ³Severn Trent Water, UK

Successful commissioning of Basingstoke STW DEMON® liquor treatment plant

Inkpin, L., Madden, G., Merry, J., Fountain, P., Thames Water, UK

Ammonia removal with different deammonification technologies from thermal hydrolysis anaerobic digestion dewatering liquors

Ochs, P.^{1,2}, Martin, B.², Germain-Cripps, E.², van Loosdrecht, M.³, Stephenson, T.¹, Soares, A.¹, ¹Cranfield University, UK, ²Thames Water, UK, ³Delft University of Technology, The Netherlands

LANDBANK SECURITY

Landbank security issues in the United States

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

Overview of biosolids legislation, production and management in developed and developing countries worldwide

Salazar-Espitia, J.D.¹, González, A.F.R.¹, Vasco, J.M.N.², ¹National University of Colombia, ²Catholic University of Manizales, Columbia

Recontamination of dewatered biosolids by *E. coli*

Svennevik, O.K.^{1,2}, Jonassen, K.R.¹, Svensson, K.², Dadgar, F.², Hagen, L.H.¹, Westereng, B.¹, Solheim, O.E.², Nilsen, P.², Horn, S.¹, Bakken, L.¹, ¹Norwegian University of Life Sciences, Norway, ²Cambi Group AS, Norway

The Biosolids Assurance Scheme: new clothes for the Emperor?

Tompkins, D., Aqua Enviro, UK

Phosphate Acceptance Map: A new research tool for determining land suitability for application of biosolids

Wadsworth, R., Hallett, S., Sakrabani, R., Cranfield University, UK

Environment Agency Sludge Strategy – looking to the future

Foster, S. and Davis, M., Environment Agency, UK

PRE-TREATMENT

Techno-economic analysis of anaerobic digestion pre-treatment technologies for a UK site

Smith, R.W., and Rus, E., Jacobs, UK

Exelys, a simple & continuous TH technology, initial feedbacks from two installations start-up

Bigot, B.¹, MacBeath, S.¹, Nielsen, E.², ¹Veolia Water & Technologies UK, ²Veolia Water & Technologies, Biosolids Techno BU, Denmark

Prediction of viscosity based on sludge type and characteristics and its significance for thermal hydrolysis economy

Svensson, K. and Dadgar, F., Cambi Group AS, Norway

Process intensifying the circular biosolids economy via hydrodynamic cavitation. Increasing biomethane yields of secondary sewage sludge AD plants

Greenwood, E., CaviMax Ltd, UK

MAKING BIOGAS PAY (MORE) – MARKETS FOR BIOMETHANE AND CO₂

Session under development – visit www.european-biosolids.com for updates

DAY 2 – WEDNESDAY 20TH NOVEMBER

PROCESS MODELLING AND CONTROL

Simulation as a tool for assessing digestion and liquid stream interactions in the context of new regulations

Brian, K., Conidi, D., Dold, P., EnviroSim Associates Ltd, USA

Automation, control and optimisation of the sludge line at WwTP Utrecht with Aquasuite Mine

Heijkoop, D., Post, B., Koorneef, E., Royal HaskoningDHV, The Netherlands

Utilizing integrated software, proven algorithms and decades of chemical applications experience to continuously automate and optimize an already advanced municipal dewatering operation in Denmark

Abinet, R., Kemira Chemicals Germany GmbH

THICKENING AND DEWATERING

Why dewaterability of sewage sludge occurs upstream – a model to quantify the effects

Kopp, J., Kläranlagen Beratung Kopp, Germany

Vivianite & struvite: growing challenges for bioresources & wastewater operations

Smyth, M., Aqua Enviro, UK

Techno-economic analysis of post THP+AD dewatering options for a UK site

Rus, E., Jacobs, UK

Predicting dewatered cake solids after conventional AD, Pre-AD THP and Post-AD THP

Svennevik, O.K.^{1,2}, Beck, G.^{3,4}, Rus, E.⁵, Westereng, B.¹, Higgins, M.⁶, Solheim, O.E.², Nilsen, P.^{1,2}, Horn, S.J.¹, Svensson, K.², Dadgar, F.², ¹Norwegian University of Life Sciences, Norway, ²Cambi Group AS, Norway, ³Norwegian University of Life Sciences, Norway, ⁴NIBIO, Norwegian Institute of Bioeconomy Research, Norway, ⁵Thames Water, UK, ⁶Bucknell University, Lewisburg, USA

The practical implementation of reducing sludge dewatering whole life costs

Sims, J.¹ and Parker, D.², ¹Huber Technology, UK, ²Kier Services, UK

Biocage™ sludge thickening - operational experience from two water companies

Thomas, P., Crouch, J., Field, A., Afeco, UK

Demonstration of a continuous TORWASH® pilot plant for dewatering of sewage sludge

Nanou, P., Pels, J.R., Sebastiani, F., van der Meijden, C.M., Kuipers, H., Driessen, W., Vogelaar, J., TNO, The Netherlands

A look in the rear-view mirror after more than 10 years of Bucher presses operation on biosolids dewatering

Mischler, J-F., Bucher Unipektin, Switzerland

2020 AND BEYOND

UK AD through the crystal ball. AD and the Climate Action Imperative

Minter, T., Malaby Biogas, UK

Maximising efficiency when you are not starting from scratch...

Cherry, L., Severn Trent Water, UK

Lithium tracer testing across 12 sludge treatment centres to inform United Utilities' resilience strategy for AMP7

Herron, D.¹ and Croft, J.², ¹Aqua Enviro, UK, ²United Utilities, UK

Preparing for the future – NI Water's sludge strategy

Auty, D.¹ and McArthur, J.², ¹PROJEN Ltd, UK, ²Northern Ireland Water

RESOURCE RECOVERY / NEW PRODUCT DEVELOPMENT

Design of fired-clay brick prototype from biosolids generated in an Andean municipal WWTP in Colombia

Salazar-Espitia, J.D.¹, Ossa-Galvis, G.A.¹, González, F.A.C.¹, Orjuela, A.M.Z.¹, Rios, A.N.¹, Benites, D.G.¹, Vasco, J.M.N.², Yeppez, O.D.C.¹, Rubio, O.A.P.¹, Salazar, M.T.J.³, Cardona, J.A.³, Baena, J.E.⁴, Arango, L.A.⁴, Buitrago, M.⁴, Montoya, A.L.⁵, Izaza, I.C.C.⁵, ¹National Learning Service of Colombia, ²Catholic University of Manizales, Columbia, ³Caldas University, ⁴Tejares Terracota of Colombia S.A., ⁵Agua de Manizales S.A. E.S.P.

ABC economy – a three phase approach to valorising food production waste

Kleemann, R. and Murphy, F., University College Dublin, Ireland

Compact phosphorus precipitation and capture technology with operational and ecological benefits for wastewater treatment plants with anaerobic digestions

Dittmann, M., O'Brien, L., Knörle, U., Eliquo Water Group

Towards a quality-by-design approach to produce PAT-based bio-products through nutrient recovery from (digested) wastes

Vaneeckhaute, C., Université Laval, Canada

Biosolids and biogenic fertilisers: developing a circular economy

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

Futurethinking the sludge value chain

Lake, A., Iwaki, M., Hughes, S., Jacobs, UK

Rigenera sewage sludge innovative treatment for the production of organic biosolids

Cavallino, R.M. and Campi, F., Rigenera S.r.l., Italy

CONVERTING GENETIC INFORMATION INTO ACTION – PROGRESS AND PROBLEMS

Session under development – visit www.european-biosolids.com for updates

POSTERS

Microplastics from waste water treatment sludge in soil – What's the story?

Lam, M., Ricardo Energy and Environment, UK

Phosphorus in agricultural soils: the role of biofertilisers and their derivatives

Tompkins, D., Aqua Enviro, UK

Disrupting dewatering... dredging and subsequent microplastic removal

Pring, W., KCP Ltd, UK

Anaerobic digestion of solid residue from lignocellulose catalysis

Hurst, G., Peeters, M., Tedesco, S., Manchester Metropolitan University, UK

Microplastics on land: is sewage sludge the problem?

Radford, F., University of Southampton, UK

Supporting Organisations

