EUROPEAN BIOSOLIDS AND ORGANIC RESOURCES CONFERENCE, EXHIBITION & SITE VISITS


Invitation to Register

Monday 20th November
- Dewatering
- Maximising Energy
- Process Efficiency
- Odour
- THP

Tuesday 21st November
- Liquor Treatment
- Material use
- New Markets
- Pre-treatment
- End of Waste Seminar

Wednesday 22nd November
- Site Visits:
  - Davyhulme Advanced Sludge Treatment Plant
  - Saria's ReFood Anaerobic Digestion Plant, commercial (waste-fed)

Supporting Sponsor:

Supporting Organisations:

Media Partners:

www.european-biosolids.com
PLENARY
From incineration to digestion over 10 years
Jolly, M., Black & Veatch, UK

DEWATERING
Mobile Sludge Thickening: Results from Anglian Water’s Shop Window
Inman, D., Robino, T., Capeau, P., Patheynh, R., 1 Anglian Water Services, UK, 2 Orege, France
Quantification of EPS and the role PSD and EPS play on dewaterability of THP digested sludge
Molokwu, O., Masse, A.L., Gavory, M., Moreira, L., 1 Thames Water, UK, 2 ENSCR, France
A rough guide to trial/mobile thickeners and dewaterers
Sims, J., Huber, UK
Comparison of sludge dewatering technologies on Cambi hydrolysed digested sludge
Vliegen, J., GEA

THP
The Microbial Community of Thermal Hydrolysis Digesters
Mah, J., Novak J., Virginia Tech, USA
Comparing the performance of Thermophilic and Mesophilic anaerobic digestion of THP Pre-treated Sewage Sludge
Shan, A., Gurtun, L., Perez, E.R. Thames Water, UK
Advanced Digestion of Sludge enhances shift of biosolids management strategy in Beijing
Liao, Z., Zhang, T., Huang, O., 1 Cambi Group AS, Norway, 2 Beijing Drainage Group, PR China, 3 Beijing General Design Institute of Municipal Engineering, PR China

ODOUR
Abatement techniques to treat odorous chemicals
Hantoosh S., Environment Agency, UK
Managing and mitigating odour at Anaerobic Digestion facilities
Wise, S., Amec Foster Wheeler, UK

MAXIMISING ENERGY
Calcium nitrate dosage results in improved biogas quality in the anaerobic digesters
Stoeck, T., Filker, S., Breiner, H-W., Ettl, M., Doppelbauer, G., 1 University of Kaiserslautern, Germany, 2 Yara Industrial, Germany
Optimal operational conditions for conventional anaerobic digestion of sewage sludge
Giacalone, S., 1 Thames Water Utilities, UK, 2 Imperial College London, UK

PROCESS EFFICIENCY
BioWin modelling to reduce the Avonmouth digester commissioning programme from 6 months to 6 weeks
Forcades, G., Smyth, M., Law, I., Arnott, T., 1 Aqua Enviro, UK, 2 Wessex Water Enterprises trading as Geneco, UK, 3 University of Bath, UK
The Grit Problem: Contamination of AD Feed Materials
O’Loain, R., CDEnviro, UK

Day 1 Monday 20th November
MATERIAL USE

Norwegian Sludge and Fertiliser Regulation Revision: A Post-Brexit Model?
Tornes, O.1, Whipps, A. 2, 1 IVAR IKS, Norway, 2 Pell Frischmann, UK

Balancing the benefits and impacts of spreading waste-derived materials to farmland
Davis, M., Martin, I., Environment Agency, UK

Water 2020 Future Strategy – Thinking systemically to drive future bioresources strategy
Roach, N., Penny, M., Business Modelling Associates, UK

HACCP for bioresources: a reality check
Tompkins, D., Aqua Enviro, UK

Meeting BAS & Regulatory Requirements while Generating Income from Biosolids
Stack, J., Severn Trent Water, UK

Roadmap for implementation of optimal nutrient recovery treatment trains at WRRFs
Vaneeckhaute, C.1, Belia, E.2, Meers, E.1, Tack, F.M.G. 3, Peter A. Vanrolleghem, P.A, 1 BioEngine, Université Laval, Canada, 2 Primodal Inc., Canada, 3 EcoChem, Ghent University, Belgium

Biosolids, Biogas and the Realisation of the Circular Economy in Norway
Tornes, O.1, Whipps, A. 2, 1 IVAR IKS, Norway, 2 Pell Frischmann, UK

Co-digestion and food waste anaerobic digestion: BioWin modelling for design and optimisation
Fargacs, G, Aqua Enviro, UK

Maximizing digestate quality in co-digestion applications
Theodoulou, M., Macloud G., Malpica de la torre, J., Penny J, GE Water & Process Technologies, Canada

Dissolvable polymer makes AD more profitable
Williams, J., Aquapak Polymers, UK

Will dried sludge from fish farming become a contributor or competitor to the utilization of municipal sludge?
Rohold, L., Scanship, Norway

Land remediation using a wide range of organics residues
Gibbs, P., REA, UK

NEW MARKETS & MATERIALS

Industrial Scale Plant for Sewage Sludge Treatment by Hydrothermal Carbonization in Jining/ China and Phosphate Recovery by TerraNova
Buttmann, M., Terranova Energy, Germany

A US Perspective on Alternative Uses of Thermal Processes
Burrowes, P, Williams, T., Lukicheva, I., CH2M, Canada

Waste and wastewater characterisation to minimise Opex and maximise energy generation
Burgeiss, A., Smyth, M., Aqua Enviro, UK

The application of WAS-only Thermal Hydrolysis at Psychlia WWTP
Zikakis D.1, Chauvy J. 2, Droboqaanni L.1,2, Georgakopoulos A.1,3 Actor S.A., Greece 2 Cambi AS, Norway

Chemistry mass balance across THP digesters (recirculation loop and feed) in five different Sewage Treatment Works
Ghafuri, M.1,2, Fountain, P1, Shana, A.3, Macedo, E.2, Higgins, M.1, Tilahun, D.2, 1Thames Water, UK, 2 University of Bradford, UK, 3 Bucknell University, USA

Liquor Treatment Technologies Advancement over AMP 5 & 6
Wiltshire, P., Tring L., Sweco, UK

Treatment of Dewatering Liquors Using Innovative Expanded Bed Biofilm Reactor Technology
Dempsey, M., Manchester Metropolitan University, UK

The Potential of Resource Recovery at Effluent Treatment Plants
Driessen, W., Hendricks T., Paques, Netherlands

LIQUOR TREATMENT

Nutrient Recovery by Novel Membrane Stripping
Luning L., van de Ven, M., Traksel, D., Sustec BV, Netherlands

Anammax for Sidestream Treatment of Wastewater Effluent
Pepper, I., University of Arizona, USA

The assessment of risk in the selection of post THP sludge liquor treatment
D. Nemtsov, D., Poznanska-Chapman, K., Hopkins S., Matt MacDonalD Bentley, UK

Treatment of thermal hydrolysis dewatering liquors using the Amtreat process at Leigh WwTW, IU
Bungay, S.1, Edginton, R.2, 1 Helix ECL, UK, 2 United Utilities, UK

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CLOSING PANEL DEBATE

Biosolids: has land application had its day?
Led by Dr David Tompkins, Aqua Enviro and including - John Williams, ADAS, Mike King, Geneco and Professor Stephen Smith, Imperial College
Now in its 22nd year, the conference has a reputation for quality and attracts the most authoritative global experts in biosolids and organic resource handling, treatment and recycling. The programme includes the latest innovations in and updates to technologies. Presentations from respected industry experts and newcomers highlight the development of technologies and legislation from inception to full-scale installations.

With over 250 delegates from all over Europe and beyond, many of them return every year for the technical presentations, networking opportunities and stimulating new ideas.

**END-OF-WASTE SEMINAR**  
In conjunction with the Resource Recovery from Waste (RRfW) programme

Changing the regulatory status of your material from waste to product can be an essential first step in market acceptance. This facilitated session will bring together experts from industry (Ostara and SecAnim), the environmental regulators (EA), the legal profession (TK Associates), scheme owners (REAL) and academia (Leeds University) to discuss previous experience of the End-of-Waste process and to look ahead at what the future might bring.

This is your opportunity to hear first-hand how companies have taken materials through the end of waste process, how the EU fertiliser regulations may change the playing field, and how the process is driven by data.

**SITE VISIT INFORMATION TALKS**  
for details see overleaf

For those who have booked to attend site visits on Wednesday

**YOUNG PROFESSIONALS AND STUDENT POSTERS**

Biosolids Assurance Scheme (BAS): The successes and challenges met whilst delivering and implementing on Dw Cymru Welsh Waters (DCWW) identifies Sludge Treatment Centres (STCs)
Provat, C., Ward, F., Dw Cymru, UK

The Power B-Ind Sludge Visualisation
Plant, C., Business Modelling Associates, UK

Biosolids Accumulation and Management in Waste Stabilisation Ponds: Analysis of Envirotechnoeconomic directions for Rural and Suburban communities in Europe
Bassey, O.B., Coventry University, UK

Birth of a biotechnology outside the fields of application of medical research or Agronomy
D’Alexandris, J-M., Lyseconcept, France

Formulation of novel fertilisers from bioenergy wastes: nutrient fractionation, dewaterability and stability of anaerobic digestate and biomass ash mixes.

Enhanced in-situ Biodelignification & Methane Generation in Model Lignin Wastes
Muaz-Us-Salam, S., Cleall, P.J., Harbottle, M.J., Cardiff University, UK

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**LOCATION & VENUE**

The Royal Armouries is in Leeds city centre in the waterfront development, Clarence Dock.

The museum houses a large part of the national collection of arms and armour. The venue has on-site hotel accommodation at the Express by Holiday Inn and a multi-storey car park.

Leeds is only 2 hours from London by train and there are flights from across the UK and Europe into Leeds Bradford International Airport or there is a direct train from Manchester Airport.

**CONFERENCE DINNER**  
Monday 20th November

Brasserie Blanc, in a converted Victorian mill on the canal which is full of character and atmosphere. Tickets are £60 + VAT per head and guests will enjoy drinks on arrival, 3 course dinner and half a bottle of wine.

The Conference Dinner is a great opportunity to network with people in the industry in a relaxed atmosphere. Why not take a corporate table to entertain your guests? This is a perfect opportunity to impress your most important clients. The event is always a sell out so we encourage you to book early to avoid disappointment.

Full travel and accommodation details will be sent when you register. www.aquaenviro.co.uk
Day 3 Wednesday 22nd November

SITE VISITS

Delegates have the option of two site visits. For both visits, a coach will collect participants from Leeds early on the morning of Wednesday 22nd November. Lunch will be provided and there will be a return coach to Leeds for late afternoon. Places are limited.

Option 1. Davyhulme Advanced Sludge Treatment Plant

United Utilities' flagship Advanced Sludge Treatment Plant at Davyhulme, Manchester. You will have an opportunity to see the whole of the sludge treatment train from the import cake silos, pre-dewatering centrifuges, Cambi thermal hydrolysis plant, digesters and dewatering, as well as the New Malmberg BIOMETHANE PLANT. The site aims to process 91,000 tonnes of dry solids per annum and the tour will be led by United Utilities' experienced Operations team, able to talk you through plant modifications and efficiencies made over the past 6 years.

The visit will also include a workshop and lunch designed to enable participants to network with one another and engage with experts in the field.

Option 2. Saria’s ReFood Anaerobic Digestion Plant, commercial (waste-fed) facility, Widnes

You will have an opportunity to see the whole digestion process at a commercial (waste-fed) anaerobic digestion facility, from feedstock (e.g. preparation, pre-treatment), digestion and gas and digestate handling. ReFood Widnes was Saria’s second Anaerobic Digestion facility in the UK and their first Gas to Grid plant. It is permitted to process up to 150,000 ton p/a following the recent expansion of the plant completed Spring 2017. The site currently exports up to 1230m³/hr of Biomethane which is injected direct to Grid. The resultant whole Digestate is accredited to the PAS110 standard and supplied as a fertiliser for local agriculture.

The visit will include a discussion on the challenges faced by AD facilities outside the Water Industry, what the future might hold, as well as allowing delegates to network with one another and experts in the field.

EXHIBITION AND SPONSORSHIP

Stand spaces are 3m x 2m for £995 plus VAT for two days including one person to attend the stand, you then also get a 20% reduction for any delegates wishing to attend the conference.

- 250-300 delegates attending over 2 days
- All delegate refreshments served in the exhibition area allowing plenty of time to network informally

Current exhibitors include:

**Cambi**  
Verder  
Drylet  
Eliquo Hydrok  
Mavilec Green Energy  
Veolia Water Technologies  
Suez  
Huber Technology  
Aqua Enviro  
Evergreen Water Solutions  
Kemira Chemicals UK  
EMS Industries  
GEA UK  
SNF Floerger  
Seepex UK  
4R Group  
CSO Technik  
Euroby  
MSE Hiller

The Biosolids is a great opportunity to raise the profile of your organisation to this specific target audience whilst showcasing your solutions to influential members of the industry.

This isn’t just one marketing opportunity; sponsors of the Biosolids are prominent on all the marketing and advertising before and during the conference. We welcome your input to tailor the sponsorship package to showcase your latest developments and be part of Europe’s leading conference for the biosolids and organic resources industries.

For more details on Sponsorship or Exhibiting please visit [www.european-biosolids.com](http://www.european-biosolids.com) where you can download an exhibition booking form or contact Clare: e. clarehunter@aquaenviro.co.uk | t. +44 (0)1924 257891

BOOKING

You can register online or download a printable booking form at [www.aquaenviro.co.uk](http://www.aquaenviro.co.uk)

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Please direct any registration queries to Clare Hunter: e. clarehunter@aquaenviro.co.uk | t. +44 (0)1924 257891

[www.european-biosolids.com](http://www.european-biosolids.com)
Water Quality: the challenge of distributing water via ageing pipes conference

8TH MARCH 2018, BIRMINGHAM

CURRENT SITUATION

DWI – speaker TBC

The Challenge of Managing Quality Risk & Resilience in Water Networks
John Sim, Independent Consultant

EU Public Survey on Quality of Drinking Water Quality
Igleka Vassileva, Ecorys

CORROSION

Water quality management in the distribution network
- calibrated chlorine decay model to minimise bacteriological and customer perception risk
Hugh Thomas, Atkins

Using pipe condition assessments as a decision aid to the implementation of preventive and curative mitigation solutions for ageing pipes
Flavia Zraick, CIRSEE - Water Processes & Applications

Developing a conditioning strategy: Is the Langelier Saturation Index still useful?
Lisa Barrott, MWH

PRACTICAL CASE STUDIES

Implementation and Challenges of Ice-Pigging
Michael Beresford – Project Manager for Mace but seconded to Affinity Water

Zonal Studies Approach
Asset Performance Manager from Welsh Water

Managing Lead in Private Water Supply Networks on MOD sites
Sarah Maiden, Kelda Water

CLOSING PANEL DISCUSSION

Aqua Enviro Specialist Technical Training

6th December 2017
ODOUR MANAGEMENT: AN INTRODUCTION TO ODOUR REGULATION, ASSESSMENT AND CONTROL?

7th December 2017
PHOSPHORUS REMOVAL AND TERTIARY TREATMENT PROCESSES

20th February 2018
DESIGN OF ACTIVATED SLUDGE SYSTEMS

21st February 2018
OPERATION & CONTROL OF ACTIVATED SLUDGE PLANTS

22nd February 2018
MICROSCOPIC EXAMINATION FOR THE OPERATION & CONTROL OF WASTEWATER TREATMENT PLANTS

24th -25th April 2018
DIGESTER OPERATION AND MAKING THE MOST OF THE DIGESTATE