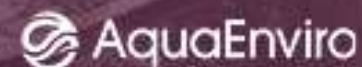


EUROPEAN WASTE WATER MANAGEMENT VIRTUAL CONFERENCE & EXHIBITION

13th - 14th October 2020



Sponsors



TUESDAY 13th OCTOBER

Conference Opening and Welcome

KEYNOTE

Resource recovery: some potentials and their caveats

Willy Verstraete, Ghent University, Belgium

TECHNICAL SESSION 1

AMP 6 PHOSPHORUS REMOVAL EXPERIENCES

So where have we landed with Lower P Permits?

Sunner, N., Stantec, UK

Optimising chemical dosing to meet P consents in Yorkshire Water

Pilgrim, E.¹ and Smyth, M.², ¹Yorkshire Water, ²Aqua Enviro, UK

FUTURE CONSENT CHALLENGES

The role of wastewater treatment works in the future of antimicrobial resistance

Osborn, B., Byrne, R., Sandford, G., Thomas, D., Waddington, C., Dobson, S. and Gordon, C., Mott MacDonald, UK

Can micropollutant and nutrient removal from municipal wastewater effluent be combined?

Boelee, N.¹, van den Eijnde, T.¹ and Bates, P.², ¹Nijhuis Water Technologies, The Netherlands, ²Nijhuis, UK

<p>Initial operating experiences in achieving a 0.2 mg/l P standard at Goscote WwTW Cooper-Smith, G.¹ and Hughes, P.², ¹Eliquo Hydrok, ²Mott MacDonald Bentley, UK</p>	<p>Beyond ultra-low effluent phosphorus concentration: the benefits of using rare earth elements in wastewater treatment Haneline, M.R., and Wherry, L.S., Neo Chemicals and Oxides, USA</p>
<p>Meeting stringent phosphorus standards – FilterClear design and commissioning experiences in United Utilities Huo, C.¹, Rostrom, W.², Narroway, Y.³, Ridge, D.³ and Hodge, L.², ¹Bluewater Bio, UK, ²MMB, UK, ³United Utilities, UK</p>	<p>P-Removal without chemicals – containerised electrocoagulation as an innovative greener alternative Nkrumah, K., Kolina Ltd, UK</p>
<p>Exhibition, Networking and Themed Roundtable Discussions</p>	
<p>Dedicated time for you to explore the sponsor and exhibitor area, you can also join group discussions and network with other attendees.</p>	
<p>Break</p>	
<p>TECHNICAL SESSION 2</p>	
<p>BIOLOGICAL NUTRIENT REMOVAL</p>	<p>SIDESTREAM LIQUORS – NITROGEN REMOVAL</p>
<p>Easy P-sy? Phosphorus 0.2-0.4 mg-Ptot/L in AMP6 Wickens, D. and Luck, R., Severn Trent Water, UK</p>	<p>Liquor Treatment – 25 years of AMTREAT® Bungay, S., Helix ECL, UK</p>
<p>Enhanced nutrient removal using HYBACS Biddle, J., Bluewater Bio, UK</p>	<p>Commissioning and operation of the UK's largest DEMON® deammonification liquor treatment plant Collin, C., Nayeri, S., Bhumgara, Z. and Chan, T.F., Black and Veatch Ltd, UK</p>
<p>Cycle Activated Sludge Technology (C-TECH™) – What discharge values of total phosphorus can be achieved in a bioreactor without post-treatment? – A Case Study Jabornig, S.¹, Doblinger, C.¹, Wutscher, K.¹ and Hazard, B.², ¹SFC Umwelttechnik GmbH, Austria, ²Trant Engineering Ltd, UK</p>	<p>Membrane Aerated Biofilm Reactor for side-stream treatment: let the anammox run wild Coutts, D., Guglielmi, G., Houweling, D., Ireland, J., Reeve, M. and Peeters, J., Suez Water Technology and Solutions, Italy</p>

<p>The HIAS Process: Next generation biological nutrient removal Saltnes, T. and Øfsti, A.T., Hias How20 AS, Norway</p>	<p>Start-up and experiences with side-stream nitrogen removal at Amsterdam Airport Schiphol WWTP de Graaff, M.S.¹, Robinson, C.¹, Gerhardt-Meillink, P.¹ and Meulenkamp, R.², ¹Evides Industriewater, The Netherlands, ²Sweco, UK</p>
<p>Membrane Aerated Biofilm Reactor as a flexible, resilient and reliable solution for the upgrade of existing WWTPs: data from full-scale installations Guglielmi, G., Houweling, D., Coutts, D., Ireland, J., Reeve, M., Peeters, J., Suez Water Technology and Solutions, Italy</p>	<p>IFAS ANITA™ Mox Deammonification process for treating THP reject water: First full scale plants in operation and lessons learnt Bigot, B.¹, Lemaire, R.², Graveleau, L.², Veuillet, F.², Christenson, M.³, Nussbaum, B.³, Zhao, H.⁴, ¹Veolia Water Technologies, UK, ²Veolia, France, ³AnoxKaldnes, Veolia, Sweden, ⁴Kruger Inc., USA</p>
<p>Exhibition and Networking</p>	
<p>Break</p>	
<p>TECHNICAL SESSION 3</p>	
<p>ALTERNATIVE AND EMERGING TECHNOLOGIES</p>	<p>MEMBRANES</p>
<p>Evaluating a pilot-scale Revolving Algal Biofilm (RAB) treatment system for sustainable recovery of N and P and reduction in carbon intensity at the Sioux City, IA WWTP Dancer, J., Gross-Wen Technologies, USA</p>	<p>BNR-MBR – Design and commissioning experience Clark, A., Costain, UK</p>
<p>Pilot trial of Microvi MNE at Scottish Water Fox, R.¹ and Nair, A.², ¹Scottish Water, ²Microvi UK Ltd, UK</p>	<p>Membrane bioreactors – operating and optimisation Smyth, M., Aqua Enviro, UK</p>
<p>Virtual Tour and Networking</p>	

WEDNESDAY 14TH OCTOBER

KEYNOTE

The Big Picture of climate change: How the water industry can correct for the current failures in macroeconomic theory to address the physical basis of climate change

Stephen Palmer, Technical Director, Stantec, UK

TECHNICAL SESSION 4

TERTIARY NITROGEN REMOVAL BIOFILM SYSTEMS

Ammonia nitrogen (NH₃ + NH₄⁺) removal using aeration of Submerged Aerated Filters (SAF)

Baird, A.¹ and Lawrence, A.², ¹WPL Ltd, ²University of Portsmouth, UK

Tertiary N and P removal with optimised continuous sand filters, an overview of long-term full-scale plant results

Al-Massri, F. and Wouters, H., BW Products, The Netherlands

Evaluating a demonstration-scale Revolving Algal Biofilm (RAB) treatment system for N and P recovery for small cities

Gross, M., Gross-Wen Technologies, USA

CARBON MANAGEMENT & SUSTAINABILITY

Delivering sustainable solutions through the AMP7 wastewater programme

Knightridge, J. and Nineham, N., Mott MacDonald, UK

UK water sector: from carbon management to net zero – how could we get there?

Manidiki, M. and Depala, P., Mott MacDonald, UK

Water industry contribution to carbon capture and storage

Hodkin, D., WRc, UK

Exhibition and Networking

Break

TECHNICAL SESSION 5

CHEMICAL INVESTIGATIONS PROGRAMME

Towards a more sustainable WINEP strategy

Jeavons, J.¹, Jolly, M.² and Smith, C.¹, ¹Stantec, ²Yorkshire Water, UK

Supporting the water industry to meet WINEP obligations via the UKWIR Chemical Investigations Programme

Brammer, J. and Thornton, A., Atkins, UK

GRANULAR ACTIVATED SLUDGE

Design development and start-up of an aerobic granular sludge SBR (Nereda™) under cold and weak wastewater conditions

Johnson, B.¹, Tsotsos, M.², Black, J.³, Fox, E.⁴, Mansell, L.³ and Oliver, B.⁴, ¹Jacobs, USA, ²Jacobs, UK, ³United Utilities, UK, ⁴Royal HaskoningDHV, UK

Nereda® package plants: a scaleable solution to meet P consents within PE of 500-2000

Kerstens, S., Navalho Pires Coelho, F., Oliver, B. and Cady, S., Royal HaskoningDHV

<p>The National Investigations Programme – 2020- 2021 – Mechanisms for Removal Davies, S., Dai, Z. and Herron, D., Aqua Enviro, UK</p>	
<p>Exhibition and Networking</p>	
<p>Break</p>	
<p>TECHNICAL SESSION 6</p>	
<p>MODELLING</p>	<p>SIDESTREAM LIQUOR TREATMENT – PHOSPHORUS REMOVAL</p>
<p>Process models help to optimise a major upgrade of the largest plant in New Zealand Takacs, I.¹, Hauduc. H.¹, Morgan, S.², Brian, K.², Loughran, P.³ and Murthy, S.⁴, ¹Dynamita, France, ²WaterCare, New Zealand, ³Stantec, UK, ⁴NewHub, USA</p>	<p>Phosphorus discharge reduction, through recovery, utilising the Quickwash® process on various municipal wastewater treatment side-streams Godsey, A., The City of Perrysburg, USA</p>
<p>Nitrogen and phosphorus mass balance investigation on four wastewater treatment works Dai, Z., Aqua Enviro, UK</p>	<p>Battling climate change using struvite as phosphorus crop nutrition van Spingelen, R. and Leatherwood, R., Ostara, USA</p>
<p>Poster Award and Conference Close</p>	