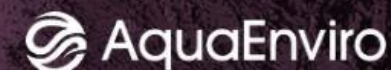


EUROPEAN WASTEWATER MANAGEMENT CONFERENCE & EXHIBITION

28-29 September 2021 Birmingham / Online



Sponsored by



TUESDAY 28TH SEPTEMBER

	ROOM 1	ROOM 2
	Conference Opening and Plenary	
09.30 – 09.35	Conference opening and welcome	
09.35 – 10.00	Wastewater-based Epidemiology and Digital Transformation: Their role in building Water-Smart Cities Prof Dragan Savic, CEO, KWR Water Research Institute, the Netherlands	
	Design Approaches	Phosphorus
10.05 – 10.30	Optioneering at East Hyde STW to meet the new growth and regulatory drivers Lewin, I., Stantec, UK	Process Integration for a Circular Economy of Phosphate Eddowes, P., Arvia Technology, UK

10.30 – 10.55	Collaborative design the YW AMP7 way Bullen, A. ¹ and Jeavons, J. ² , ¹ Yorkshire Water, ² Stantec, UK	Modular te-cyc solution satisfying growth drivers, N and Bio-P removal in a single treatment step Hazard, B. ¹ and Jabornig, S. ² , ¹ Te-Tech Process Solutions Ltd, ² SFC Umwelttechnik, Austria
10.55 – 11.20	Morning break and networking	
	Granular Activated Sludge	Phosphorus cont.
11.20 – 11.45	Performance and operational experience of Nereda® at United Utilities Black, J., Brabazon, E., Shields, R., Halloran, J., Duckworth, N., Byron, R., United Utilities, UK	Let's not forget the basics of chemical Phosphorus removal Sunner, N., Stantec, UK
11.45 – 12.10	Nereda®: Breakthrough Technology of the Decade! Performance check-in and where to next? Oliver, B., Royal HaskoningDHV, UK	Enhanced P removal through changing design and operational parameters to meet new permits with Sand filters and utilising sand cycle Wilson, V. ¹ , Wouters, H. ² , Medley, G. ¹ , Matthews, R. ¹ , van Opijnen, E. ³ , Gaskin, L. ¹ , ¹ Dwr Cymru Welsh Water, ² Brightwork BV, ³ BW Products BV, The Netherlands
12.10 – 12.35	Modelling Full-scale Granular Sludge Sequencing Tank Performance Burger, G. ¹ , Dold, P. ¹ , Farilamb, M. ¹ , Conidi, D. ¹ , Du, W. ² , Alexander, B. ² , Giesen, A. ² , ¹ EnviroSim Associates Ltd, Canada, ² Royal HaskoningDHV	Phosphorus Removal using FilterClear with Operational Flexibility and Reliability and Lessons Learnt on Caustic Dosing Huo, C. ¹ , Biddle, J. ¹ , Rostron, W. ² , Guest, A. ³ , ¹ Bluewater Bio, ² MMB, ³ United Utilities, UK
12.35 – 13.00	Nereda®: The route to sustainable Phosphorus removal and bio polymer recovery Oliver, B., Royal HaskoningDHV, UK	Delivering Bio-P solutions for Yorkshire Jeavons, J. ¹ , Bullen, A. ² , Jolly, M. ² , Machado, C. ¹ , Jakeman, C. ² , ¹ Stantec, ² Yorkshire Water, UK
13.00 – 14.00	Lunch and networking	
	Digital Approaches	Phosphorus cont.
14.00 – 14.25	Digital twin development implementation, and results for the Changi WRP, Singapore Johnson, B., Kadiyala, R., Owens, G, Lake, A., Jacobs	Severn Trent Water install the largest CoMag™ plant in the World to meet one of its tightest P permits at Finham STW Vale, S., Severn Trent Water, UK

14.25 – 14.50	Using edge analytics to optimize pump performance & asset management Rolls, M., Specific Energy, UK	The implementation of the CoMag process to enhance the Phosphorus removal performance at the Welsh Water plants at Lletty Brongu and Ruthin Radford, S. ¹ , Wilson, V. ² , ¹ Evoqua Water Technologies, ² Dwr Cymru Welsh Water, UK
14.50 – 15.15	Using machine learning techniques to optimise anaerobic digestion performance Stephenson, M. ¹ and Minall, R. ² , ¹ Hal24k Water, UK, ² Aqua Enviro, UK	Reliably meeting very low Total P permits (while not breaching the metals permit!) O'Shea, T. and Kissack, C., Severn Trent Water, UK
15.15 – 15.40	Afternoon break and networking	
	Digital Approaches Cont.	Phosphorus cont.
15.40 – 16.05	From pilot to full-scale - AI detection of sewer blockages Woolley, T. and Lubbers, C., Royal HaskoningDHV, UK	Simplicity is the ultimate sophistication* Trials show how existing equipment can help utilities meet their onsite P-removal requirements *Leonardo da Vinci Baird, A., WPL, UK
16.05 – 16.30	Preventing pollution from sewerage rising mains using existing monitoring and cloud analytics Heywood, G., Ovarro, UK	AMP 6 highs and lows! A tale of 3 sites Luck, R., Severn Trent Water, UK
16.30 – 16.55	WaterExe4.0 - Results of the first meta-study on digitization in the water industry in the German-speaking region Müller-Czygan, G., Wimmer, M., Tarsayuk, V., Hof University of Applied Science, Germany	Smarter Water Catchments – a partnership approach to deliver outcomes for healthy rivers” Soteriou, H., Thames Water, UK
17.00 – 18.30	Drinks Reception in the exhibition hall	

WEDNESDAY 29TH SEPTEMBER

	ROOM 1	ROOM 2
	Plenary Keynote	
09.00 – 09.25	Fate of microplastic particles during wastewater and sludge treatment - a comprehensive approach Katrin Bauerfeld, Technische Universitaet (TU) Braunschweig, Institute for Sanitary and Environmental Engineering, Germany	
	Instrumentation and Monitoring	Net Zero
09.30 – 09.55	Dynamic resilience for wastewater treatment processes: the use of real instrument data to understand assets Holloway, T. ¹ , Williams, J. ¹ , Yang, G. ² , Ouelhadj, D. ¹ , ¹ University of Portsmouth, ² Southern Water, UK	Opportunities to Deliver Rapid Reductions in Process Emissions from UK WwTW's Van Voorthuizen, E. and Lavender, P., Royal HaskoningDHV
09.55 – 10.20	Intelligent and dynamic control of optimal WWTP operation from microbial sequencing Stokholm-Bjerregaard, M.A. ¹ , Hanse, A.A. ¹ , Strandbæk, I. ² , Vølund, I. ³ , Thornberg, D. ⁴ , Hughes, L. ⁵ , Nielsen, P.H. ⁶ , ¹ Krøger A/S, ² Aalborg Forsyning, ³ VandCenter Syd, ⁴ BIOFOS, ⁵ Aarhus Vand, ⁶ Aalborg University, Denmark.	Making our trickling filters fit for the low carbon future - Part 2; short term TSS variability Pearce, P. ¹ and Yang, G. ² , ¹ Farmiloe Fisher Environment Ltd, ² Southern Water, UK
10.20 – 10.45	Sentry: Real-time microbial performance monitoring in wastewater treatment systems Lamb, N., QuadraChem Laboratories, UK	How did AMBI-ROBIC achieve Low-Carbon, Low-Cost, Low-Temperature Anaerobic Treatment at a municipal wastewater site in the UK? And is this process set to become the industry standard for the 21st Century? Rogers, A. and Holohan, C., NVP Energy, UK
10.45 – 11.10	Accurate, low-maintenance and real-time measurement of BOD5/COD/TOC for feed forward control and compliance monitoring in wastewater treatment works Stevens, R., Proteus Instruments, UK	Greenhouse gas emissions from wastewater treatment processes Longhurst, P., Jefferson, B., Athanasopoulos-Tseles, D., Cranfield University, UK
11.10 – 11.40	Morning break and networking	

	Process Intensification	Circular Economy
11.40 – 12.05	High-rate primary filtration in wastewater treatment plants: an efficient way to upgrade overall plant performance Wouters, H. and Kramer, A., Brightwork BV, the Netherlands	Systems thinking and systems analysis for water industry operations, operating costs and investment risk assessment a tool for successful water utility engagement in the circular economy Palmer, S., Quartly, L., Smith, C., Stantec Ltd, UK
12.05 – 12.30	Bubble-less benefits: Results from implementing MABR at scale Constantine, T. ¹ , Willoughby, A. ¹ , Lake, A. ¹ , Nielsen, P-H. ² , Uri, N. ² , ¹ Jacobs, UK, ² VCS Denmark	"Waste is only a resource in the wrong place" Kisielewski, P. and Hammond, P., CCm Technologies Ltd., UK
12.30 – 12.55	Intensification and Densification of New Microorganisms for Wastewater Treatment Nair, A., Microvi Biotech, UK	Natural Solutions Developing a nature-based toolkit: Severn Trent's journey towards a nature-based approach Palmer, M., Cooke, A., Smith, R., Richards, A., Smith, R., Severn Trent Water, UK
12.55 – 13.20	Fermentation of sievings from domestic wastewater for improvement of biological nutrient removal Oosterhuis, M. Royal HaskoningDHV, the Netherlands	Seeing the light...on algae treatment Kissack, C. and Al-Janabi, S., Severn Trent Water, UK
13.20 – 14.15	Lunch and networking	
	New and Emerging Technologies	Natural Solutions cont.
14.15 – 14.40	Treatment of emerging contaminants for non-potable wastewater reuse - An evaluation of a novel combination of membrane ultrafiltration and a non-thermal plasma-based oxidation process Hazard, B. ¹ , Jabornig, S. ² , Marinheiro, L. ³ , Baptista, I. ⁴ , Löblich, S. ⁵ , ¹ Te-Tech Process Solutions Ltd, ² SFC Umwelttechnik, Austria ³ AST – Environmental Solutions and Services,, ⁴ AQUASMART – Water and Wastewater Treatment Solutions, ⁵ WEDOTECH, Portugal	Harnessing the natural power of algae: meeting future legislation of phosphate and ammonium Ekins-Coward, T., Castro-Castellon, A., Ho, F., Industrial-Phycology, UK
14.40 – 15.05	What if... oxidation was not allowed? Evenblij, H. ¹ , Visser, F. ² , van Nieuwenhuijzen, A. ³ , ¹ Royal	Feasibility of Integrated Constructed Wetlands (ICW) to meet future AMP7 Total P consents Turnbull, R., Spall, S., Ludlow, A., McTaggart, R., Stantec, UK

	HaskoningDHV, ² Water Authority Vallei and Veluwe, ³ Witteveen+Bos, the Netherlands	
	Ammonia Conversion	Bathing Waters
15.05 – 15.30	Incorporation of complete ammonia oxidation into the two-step nitrification process in activated sludge systems: conceptual modelling approach Mehrani, M-J., Kowel, P., Sobotka, D., Makinia, J., Gdansk University of Technology, Poland	Protecting Bathing and Shellfish Waters: virus and indicator organism removal in wastewater treatment and disinfection White, C., Alford, H., Newberry, M., Loughran, P., Stantec Ltd, UK
15.30 – 15.55	Anita Mox for side stream deammonification lessons learned over 10 years of experience Langdon, M. ¹ , Lemaire, R. ¹ , Christensson, M. ¹ , Skonieczny, T. ² , ¹ Veolia Water Technologies, UK, ² AnoxKaldnes, Denmark	PFA: An Alternative Disinfection Technology Alford, H. and White, C., Stantec Ltd, UK
16.00	Conference Close	