TUESDAY 12TH JULY

	ROOM / STREAM 1	ROOM / STREAM 2
	Conference Opening and Plenary Keynote	
09.30 – 09.35	**Conference opening and welcome**	
09.35 – 10.00	**Keynote: Upgrading our wastewater network to protect our waterways – the scale of the challenge** Andrew Singer, UK Centre for Ecology & Hydrology	
	Natural Solutions	**Network Management**
10.05 – 10.30	**Industrial Phycology: Harnessing the natural power of microalgae as a multi-benefit nature-based solution for the wastewater industry** Ekins-Coward, T., Ho, F., Baldry, M., Industrial Phycology, UK	**What to learn from your cousins in the US about storm overflow drivers** Umble, A., Stantec, USA
10.30 – 10.55	**Exploiting urban wastewater: sustainable production of the new superfood Galdieria phlegrea with low-consumption reactors** di Cicco, M-R., Ciniglia, C., Palmieri, M., Lovinella, M., Lubritto, C., University of Campania Luigi Vanvitelli, Italy	**Eliminating harm from storm overflows: mission impossible?** Gill, E., Stantec, UK

10.55 – 11.20	**NBS and Reactive media for Phosphorus removal at Severn Trent as part of our rural strategy: characterisation, assessment, deployment** Palmer, M., Sousa, J., Smith, R.A., Richards, A., Pitt, S., Severn Trent, UK	**SewerBall: A new concept to inspect sewers using a mobile device and to monitor fluxes at various locations** Maruejouls, T.[1,2,3], Theias, H.[2], La Iglesia, J.[3], Minall, R.[4], Khan, M.[4], [1]LyRE – Suez Research Center, France, [2]AXEO TP, France, [3]Suez, France, [4]Aqua Enviro, UK
11.20 – 11.45	**Morning break and networking**	
	Managing Carbon & The Circular Economy (	
11.45 – 12.10	**Measuring Seasonal Variations in Nitrous Oxide Emissions from the Activated Sludge Process** Wild, R., Carliell-Marquet, C., Srinamasivayam, B., Vale, S., Severn Trent, UK	**Delivering Dynamic Network Management to deliver the 'wastewater network of the future'** Lavender, P., Royal HaskoningDHV, UK
12.10 – 12.35	**Process optimisation to meet wastewater net zero air quality targets** Lewis, C.[1] and Kelly, R.[2], Suez Smart & Environmental Solutions, [1]UK & [2]France	**Network optimisation using AquAdvanced Urban drainage smart digital solution** Gordon, M., Suez Advanced Solutions UK Ltd
12.35 – 13.00	**AMBI-ROBIC – Cold anaerobic treatment for UK Sewages – how NetZero Solution to implement before 2030** Rogers, A. and Holohan, C., NVP Energy, UK	**A low carbon approach to stormwater treatment** Cooper-Smith, G. and O'Brien, L., Eliquo Hydrok, UK
13.00 – 14.00	**Lunch & networking**	
	Managing Carbon & The Circular Economy cont.	**Emerging Contaminants**
14.00 – 14.25	**Methane recovery at Spernal Sewage Treatment World – a world-first application of technology** Bolton, C.[1], Dulgheru, T.[1], Jackson, R.[2], Sprague, A.[1], Madeley, N.[1], Smith, R.[3], [1]Mott MacDonald Bentley (MMB), [2]MMBC, [3]Severn Trent, UK	**An evaluation of the approaches for managing microplastics in the post-Brexit era: a case study from the Thames River** Khatri, S., University of Windsor, Canada
14.25 – 14.50	**Lessons for Process emissions we can (and must) learn today** van Voorthuizen, E.[1], and Lake, A.[2], [1]Royal HaskoningDHV, UK, [2]Jacobs, UK	**Microplastics in wastewater – Sampling, extraction and analysis – Chem 5 experiences** Bugg, T.[1] and Johnson, A.[2], [1]Aqua Enviro, [2]CEH, UK
14.50 – 15.15	**Yes, how advanced aeration control contributes to NetZero in many other ways than energy!** Hazard, B.[1], Bouchy, L.[2], Froom, M.[1], [1]Te-Tech Process Solutions, UK, [2]CreaTech360, Spain	**Innovations in new sustainable low TOTEX treatment technologies for micropollutant removal** de Wilt, A.[1] and Lavender, P.[2], Royal HaskoningDHV, [1]The Netherlands, [2]UK

15.15 – 15.40	**The basics of 50% energy saving** Newman, J., Kirkham, D., Puckering, O., Xylem Inc, UK	**Do process operational variables impact the fate of micropollutants in Activated Sludge Plants?** Herron, D.[1], Campo-Moreno, P.[2], Monkhouse, C.[1], Thornton, A.[3], [1]Aqua Enviro, [2]Cranfield Water Science Institute, [3]Atkins
15.40 – 16.00	**Afternoon break and networking**	
	Managing Carbon & The Circular Economy cont.	**Point Source Pollution Control**
16.00 – 16.25	**Key drivers and barriers to circular economy in the wastewater treatment sector** Samberger, C., Stantec, UK	**Effective and sustainable final effluent disinfection at Anglian Water using in-situ produced PFA oxidisation** Morris, P.[1], Hall, G.[2], Aubeuf-Prieur, P.[1], [1]Kemira, [2]Anglian Water Services, UK
16.25 – 16.50	**Use locally produced effluent to combat drought: wastewater is an eternal water resource** Lavender, P. and Kerstens, S., Royal HaskoningDHV, UK	**Tertiary wastewater treatment, combining sand filtration and UV technology** Wouters, H.[1], Thege, C.[2], Vermeeren, W.J.A.M.[3], [1]Brightwork BV, [2]Van Remmen UV Technology, [3]Waterboard Brabantse Delta, The Netherlands
16.50 – 17.15	**Delivering a low carbon, circular water sector** Lake, A.[1], Boere, J.[2], Katsou, E.[3], [1]Jacobs, UK, [2]Allied Waters, The Netherlands, [3]University of Brunel, UK	**Treatment of emerging contaminants "An evaluation of the te-ionTM non-thermal plasma-based oxidation process"** Hazard, B.[1], Jabornig, S.[2], Marinheiro, L.[3], [1]T-Tech Process Solutions, [2]SFC Umwelttechnik, Austria [3]AST – Environmental Solutions and Services, USA
17.15 – 17.40	**Application of Circular Economy concept towards a sustainable wastewater management: case study of a Full-scale UASB reactor in a Developing Country** Arthur, P.M.A.[1], Konate, Y.[1], Sawadogo, B.[1], Sagoe, G.[2], Ahmed, I.[3], Dwumfour-Asare, B.[4], [1]Institut International d'Ingénierie de l'Eau et de l'Environnement (2iE), Burkina Faso, [2]Waste Landfills Co. Ltd, Ghana, [3]Sewerage Systems Ghana Ltd, Ghana, [4]AAM – University of Skills Training and Entrepreneurial Development, Ghana	**Removing pharmaceutical compounds at the source and centralized to reuse wastewater effluent for irrigation purposes** Broeders, E.[1], Boelee, N.C.[1], Kramer-Hoenderboom, A.[2], Groot Kormelinck, K.[3], [1]Nijhuis Saur Industries, [2]Waterschap Rijn en IJssel, [3]Van Remmen UV Technology BV, The Netherlands
19.15	**Conference Dinner**	

WEDNESDAY 13TH JULY

	ROOM / STREAM 1	ROOM / STREAM 2
	Metagenomics	**Phosphorus**
09.00 – 09.30	**Systems tools and systems analysis approaches for evaluating biotreatment intensification and optimisation** Palmer, S., Stantec, UK	**From universal agreements to wild contradictions - the different approaches to chemical phosphorus removal across the UK wastewater industry** Thompson, A. and Hernandez-Ramirez, O., Atkins
09.30 – 09.55	**Metagenomics & Activated Sludge: Techniques, who's there, and the next steps** Sheeran, K., Herron, D., Smyth, M., Aqua Enviro, UK	**An overview of the phosphorus removal processes to meet stringent discharge limits of < 0.1 mgP/L** Andalib, M., Vice President/Wastewater Treatment Sector Leader, Stantec USA
09.55 – 10.20	**Catch me if you can: Are we really able to exploit new microorganisms to meet new and existing challenges in wastewater treatment** Nair, A., Microvi Biotech, UK	**Finding the right balance: Investigating Catchment Nutrient Balancing and delivering the benefits to phosphorous removal schemes** Palmer, M.[1], Cooke, A.L.[1], Rettino, J.[1], Gilbert, J.[2], Smith, R.[2], Davison, P.[2], [1]Severn Trent, UK, [2]Stantec, UK
10.20 – 10.45	**Metagenomics: An innovative & practical tool to drive down Carbon, OPEX, Nitrogen & Phosphorus** Smyth, M.[1], Sheeran, K.[1], Tillotson, J.[2], [1]Aqua Enviro, UK, [2]Microbe Detectives, UK	**Optimising phosphorus removal using FilterClear** Huo, C. and Biddle, J., Bluewater Bio, UK
10.45 – 11.15	**Morning break and networking**	
	AMP8 Design Challenges	**Phosphorus cont.**
11.15 – 11.40	**Navigating The New World in AMP8** Sunner, N., Stantec, UK	**Primary Sludge Fermentation – a natural step towards chemical-free phosphorus removal** Hazard, B.[1] and Wutscher, [1]Te-Tech Process Solutions, UK, [2]SFC Umwelttechnik, Austria
11.40 – 12.05	**Is over design hindering carbon reduction?** Jeavons, J.[1] and Jolly, M.[2], [1]Stantec, UK [2]Yorkshire Water, UK	**Full scale low phosphorus trials: challenging existing assets** Sandalls, C. and Baloch, I., Southern Water, UK
12.05 – 12.30	**BEWISe wastewater research facility** Davenport, R., Newcastle University, UK	**Side-Stream Fermentation to achieve low-P permits by EBPR, Viable?** Mendizabal, J., Severn Trent, UK

12.30 – 13.20	**Lunch and networking**	
	Plenary Keynote & Poster Award Presentation	
13.20 – 13.50	**The black, the green – the purple and yellow… shifting from wastewater to resource recovery** Frank Rogalla, Director of Innovation & Technology, FCC Aqualia, Spain	
13.50 – 13.55	**Student & Young Professionals' Poster Competition Award**	
	Process Optimisation	**Phosphorus cont.**
14.00 – 14.25	**Innovative Moving bed biofilm reactor (MBBR) media for total nutrient removal from municipal wastewater** Parsotamo, A.[1,2], Soares, A.[1], Barrett, M.[2], Hassan, J.[2], [1]Cranfield University, [2]Warden Biomedia, UK	**A scaling-up approach towards a VFA valorization of industrial wastewater** Casero-Diaz T., Silva-Teira A., Parama V., Gonzalez A., Castro-Barros C.M., Carballa, M, Mauricio-Iglesias, M., CETAQUA – Water Technology Centre, Spain
14.25 – 14.50	**Membrane Aerated Biofilm Reactors: the simple and sustainable way to process intensification and enhanced nitrification in existing wastewater treatment plants** Coutts, D.[1], Pitt, S.[1], Cariell-Marquet, C.[2], Vale, P.[2], Martin, I.[1], Murphy, M.[1], Guglielmi, G.[1], [1]Suez Water Technologies & Solutions, UK, [2]Severn Trent, UK	**Innovative technology for achieving UK's lowest phosphorus levels** Jarvis, S.[1], Lea, G.[1], Sandalls, C.[1], Cooper, P.[2], [1]Southern Water, [2]Veolia Water, UK
14.50 – 15.00	**Comfort break**	
15.00 – 15.25	**Retrofitting the Mobile Organic Biofilm (MOB™) Process as a hybrid fixed-film and granular sludge technology for full-scale WRFs** Calhoun, J., Nuvoda, USA	**Treatment of tertiary solids removal return liquors** Bullen, C., Florence, K., Davies, R., Siltbuster, UK
15.25 – 15.50	**Optimising Nereda performance at Inverurie** Oliver, B.[1], Fox, R.[2], Reid, G.[2], [1]Royal HaskoningDHV, UK, 2Scottish Water, UK	**Recent developments in electrochemical wastewater treatment** Cooper-Smith, G., Cowan, H., Jones, S., Matthews, Z., Power & Water, UK
15.50 – 16.15	**Developments and expansions of a suite of trickling filters design models** Pearce, P., Farmiloe Fisher Environment Ltd, UK	**Optimisation Strategy and Lessons Learned on AMP6 Low Phosphorus Sites** Sandalls, C., Hossain, A., Pinheiro, M., Liang, S., Boyer, M., Jarvis, S., Lea, G., Baloch, I., Southern Water, UK

POSTERS

Designing a microplastics sampling procedure in Thessaloniki Wastewater Treatment Plant
Lioumbas, I., Christodoulou, A., Papageorgiou, M., Papastergiou, F., Thessaloniki Water Supply and Sewerage Company SA, Greece

Recovery of nitrogen from sludge digestate polluted wastewater with advanced ammonium air stripping technology
van den Broek, J. and Buffinga, G-J., Byosis Group BV, The Netherlands

Management and Control of Biofilms
Morgan, E., KP2M Ltd T/A Power & Water, UK

Optimal storage sizing for indoor arena rainwater harvesting: Filton Airfield, UK
Kim, J. and Hofman, J., University of Bath, UK

Innovative Moving bed biofilm reactor (MBBR) media for total nutrient removal from municipal wastewater
Parsotamo, A.[1], Soares, A.[1], Barrett, M.[2], Hassan, J.[2], [1]Cranfield University, [2]Warden Biomedia, UK

Innovative technology to remove nitrogen and produce climate friendly fertilizers
Lundbom, A., Högberg, C-J., Cohen, Y., EasyMining Services Sweden AB

MIL-100(Fe): Sorbent Material for Antibiotic Removal and Recovery
Quinlivan, A., University of Nottingham, UK

Process optimisation to meet wastewater net zero air quality targets
Lewis, C.[1] and Kelly, R.[2], Suez Smart & Environmental Solutions, [1]UK & [2]France

From universal agreements to wild contradictions - the different approaches to chemical phosphorus removal across the UK wastewater industry
Thompson, A. and Hernandez-Ramirez, O., Atkins, UK

Exploiting urban wastewater: sustainable production of the new superfood Galdieria phlegrea with low-consumption reactors
di Cicco, M-R., Ciniglia, C., Palmieri, M., Lovinella, M., Lubritto, C., University of Campania Luigi Vanvitelli, Italy

Benefits of a design sprint – optioneering down from months to days
Tokaryk, M., Mott MacDonald Bentley, UK

Collaborative Problem Solving for Enhanced Biological Phosphorus Removal
Murray, S., Mott MacDonald Bentley, UK

Anoxic and Oxic-Settling-Anoxic Modified Conventional Treatment for In-situ Sludge Minimization from Industrial Wastewater
Sodhi, V[1,2], Bansal, A.[2], Jha, M.K.[2], Sodhi, N.[3], Arora, J.K.[1], [1]Climate Change Knowledge Center, Punjab State Council for Science & Technology, [2]Dr. B. R. Ambedkar National Institute of Technology, [3]Ramco International, India