

5th EUROPEAN WATER AND WASTEWATER MANAGEMENT CONFERENCE & EXHIBITION

26th – 27th SEPTEMBER 2011 • THE BARBICAN CENTRE, LONDON

Sponsored by



Prince Sultan Bin Abdulaziz
International Prize for Water

MONDAY 26th SEPTEMBER

INLET WORKS	
<i>Cinema 2</i>	
Chair – Mark Lowe, Operations Director, Aqua Enviro Ltd	
9.30 – 9.55	New recycling solution for grit, screenings and sewer washings begins commercial operation – A summary of the project development life cycle and plant performance Lloyd, J., HotRot Organic Solutions Ltd
9.55 – 10.20	Grit – You Don't Know What You're Missing! Barter, P. ¹ , Sherony, M. ² , ¹ Hydro International UK, ² Hydro International US
10.20 – 10.45	A New Hydraulic Evaluation of Spatial Resolved Velocity Profiles Allow Accurate Flow Rate Determination of Waste Water Teufel, M. and Sollicec, L., NIVUS GmbH
10.45 – 11.10	Coffee Break & Exhibition (Garden Room)
11.10 – 11.35	UV Disinfection for Treatment of Stormwater Williams, K. ¹ , Lem, W. ¹ , Petri, B. ¹ , Leech, J. ² , ¹ Trojan Technologies, ² Trojan UV Technologies UK
11.35 – 12.00	Effluent Flow Monitoring Cooper, B., Sira Certification

PLENARY KEYNOTE <i>Cinema 2</i> Chair – Dr Nigel Horan, Aqua Enviro & University of Leeds	
12.05 – 12.30	Driving Down the Industry's Energy Usage John Gilbert, Head of Energy and Carbon, Thames Water
12.30 -12.55	The Dutch Roadmap for the WwTW of 2030 Paul Roeleveld, Royal Haskoning
12.55 – 13.15	The Prince Sultan Bin Abdulaziz International Prize for Water (PSIPW) – The Nomination Process and Criteria Dr. Abdulmalek A. Al Alsheikh, General Secretary, PSIPW
13.15 – 14.15	Lunch & Exhibition (Garden Room)
SUSTAINABILITY & GHG REDUCTION <i>Cinema 2</i> Chair –Geoff Cooper-Smith, Engineering Service Manager, United Utilities	
14.15 – 14.40	Sustainability in Design – Is it Possible to Target Design to Reduce Carbon Drastically in AMP5? Caldwell, P., @one Alliance
14.40 – 15.05	Primary Sedimentation: From Neglected Common Asset to Future Keystone Technology Palmer, S.J., MWH
15.05 – 15.30	Life Cycle Assessment for Wastewater Treatment Processes Evaluation at Research Stage Rigola, M. ¹ , Morera, S. ² , Corominas, L.I. ² , Garrido, M. ² , Poch, M. ^{1,2} , ¹ University of Girona, Spain ² ICRA, Catalan Institute for Water Research, Spain
15.30 – 16.00	Coffee Break & Exhibition (Garden Room)
16.00 – 16.25	A Stochastic Multi-objective Mixed-integer Optimization Model for Biogas Production at the Blue Plains AWTP, DC Water U-tapao, C. ¹ , Gabriel, S.A ¹ , Peot, C. ² , Ramirez, M. ² , ¹ University of Maryland, ² District of Columbia Water and Sewer Authority, USA
16.25 – 16.50	Nitrous oxide emissions from wastewater treatment Winter, P., Pearce, P., Colquhoun, K., Thames Water
16.50 – 17.15	Continuous biological treatment of selected pre-treated and non-treated membrane concentrates originating from TMP and Deinking wastewater streams from pulp and paper industry. Oviasogie, U., Universitat Stuttgart, Germany

EASING WATER STRESS THROUGH THE ADOPTION OF WATER RECYCLING TECHNOLOGIES	
<i>Redgrave 2</i>	
Chair – Cath Hassell, Director, ech₂o Consultants Ltd	
9.45 – 9.55	Opening and introduction
9.55 – 10.20	Presenting a credible case for water recycling in the UK Paul Jeffery, Cranfield Water Science Institute, UK
10.20 – 10.45	No waste water Terence Westgate, AMACORD Ltd, UK
10.45 – 11.10	Coffee Break & Exhibition (Garden Room)
11.10 – 11.35	Wastewater to potable water recycling in the Food Industry Steve Goodwin, Aquabio Limited
11.35 – 12.00	One source, many uses - water recycling case studies from California, USA Sunny Wang, Black & Veatch Ltd, UK
12.05 – 13.15	Plenary Session (Cinema 2)
13.15 – 14.15	Lunch & Exhibition (Garden Room)
14.15 – 14.40	To remind communities that water can be fun and make them work together! Marnix C. de Vriend, Royal Haskoning, Netherlands
14.40 – 15.05	Rainwater harvesting today David Byers, UK Rainwater Harvesting Association
15.05 – 15.30	Rainwater harvesting – risk management Brian Buckley, Consultant, UK
15.30 -16.00	Coffee Break & Exhibition (Garden Room)
16.00 – 16.25	The quality of rainwater gathering from three roofs under wet and dry conditions John Watkins, CREH, UK
16.25- 16.50	Industrial wastewater recycling using photocatalytic reactors Irene Allcroft, CatalySystems Limited, UK
WATER TREATMENT	
<i>Ashcroft</i>	
9.55 – 10.20	Improving Productivity of Rapid Gravity Filters Using Granular Media. Wallen, A., Thames Water
10.20 – 10.45	Sustained Water Conservation by Combining Incentives, Data and Rates to Effect Consumer Behavioral Change Hill, T., Symmonds, G., Global Water Resources

10.45 -11.10	Coffee Break and Exhibition (Garden Room)
11.10 – 11.35	Simultaneous Drinking Water Winning and Treatment by In-Situ-Bioreactors Meyer, C., Krauss, M., Steinmetz, H., University of Stuttgart, Germany
11.35 -12.00	Using a Smart Water Approach to Control a Large Urban Network with Legacy Infrastructure: TaKaDu at Thames Water Horowitz, G., TaKaDu
12.05 – 13.15	Plenary Session (Cinema 2)
13.15 – 14.15	Lunch & Exhibition (Garden Room)
14.15 – 14.40	Catalysing Innovation in Water Technologies Thomas, K., Roberts, C., Abra, J., Environmental Sustainability KTN, University of Oxford
14.40 – 15.05	Novel Molecular Methods for Water Monitoring Daniell, T.J. ¹ and Longhurst, R.W. ² , ¹ The James Hutton Institute, ² EnPrint Ltd
15.05 – 15.30	Ozonation predictive models for organic micropollutant removal from natural water matrix Sudhakaran, S. ¹ , Calvin, J. ^{1,2} , Amy, G.L. ¹ , ¹ King Abdullah University of Science and Technology, Saudi Arabia, ² Texas A&M, USA
15.30 – 16.00	Coffee Break & Exhibition (Garden Room)

TUESDAY 27th SEPTEMBER

NUTRIENT & WATER FACTORIES <i>Cinema 2</i> Chair – Dr. Tony Koodie, Technical Director, Blakc & Veatch	
9.25 – 9.50	Molecular Investigations into the Microbiology of a Package Biological Nutrient Removal System Watkins, S.C., Watts, J.E.M., Williams, J., May, E., University of Portsmouth
9.50 – 10.15	Role of Microbial Community of Sludge from a Pilot-Scale Reactor Treating Real Wastewater in Simultaneous Biological Removal of Nitrogen and Sulfur Fonseca, D.F., Foresti, E., University of São Paulo, Brazil
10.15 – 10.40	Enhancing Resource Recovery Through Supply Chain Collaboration – the ‘ProBlend’ Approach Firth, W. ¹ , Hylands, K. N. ¹ and Dawson, P. ² , ¹ Sustainable Resource Solutions Ltd, ² Rolawn Ltd
10.40 – 11.05	Coffee Break & Exhibition (Garden Room)
11.05 – 11.30	How the Water Framework Directive Impacts the Water Industry: Iron Consenting Mistry, R., Atkins Ltd
11.30 – 11.55	Modelling the Full Dynamic Response of a New Waste Water Clarifier to Storm Flows Burt, D. ² , Foster, D. ¹ , Ganeshalingam, J. ² , Grand, A. ² , ¹ Thames Water Utilities Ltd, ² MMI Engineering Ltd
PLENARY KEYNOTE <i>Cinema 2</i> Chair- Neil Tytler, Manager, Water Framework Directive Information Centre, Foundation for Water Research	
12.00 – 12.25	Succession Planning for Effective Utility Management – the case and solution for Management Training Valerie Jenkinson, CEO, World Water & Wastewater Solutions LTD
12.25 – 12.50	Smart Water Networks - introducing the data-driven utility Guy Horowitz, VP Marketing, TaKaDu, Chairman, SWAN Forum
12.50 – 13.50	Lunch & Exhibition (Garden Room)
NUTRIENT & WATER FACTORIES <i>Cinema 2</i> Chair – Mervyn Goronszy, Bisasco Pty Limited, Australia (pm)	
13.50 – 14.15	Designing for the Future: Optimum Resource Recovery Process Design and Long Term Value Analyses of Recovered Commodities Palmer, S. and Nair, A., MWH (UK) Ltd

14.15 - 14.40	Windermere Phosphorus Reduction Feasibility Study Cooper-Smith, G., and Rands, J., United Utilities
14.40 – 15.05	Total Nitrogen Removal; Lessons Learnt from AMP4 and the Challenges and New Technology Applied in AMP5 Sunner, N., MWH (UK) Ltd
15.05 – 15.30	Coffee Break & Exhibition (Garden Room)
SENSORS & PROCESS CONTROL <i>Redgrave</i> Chair – Oliver Grievson, Senior Project Engineer (Process), Yorkshire Water	
9.00 – 9.25	Advanced Process Monitoring for Wastewater Treatment Works O’ Brien, M., Mazier, S., McEwan, M., Perceptive Engineering Ltd
9.25 – 9.50	Autonomous Nutrient Detector for Water and Wastewater Applications Cleary, J. ¹ , Maher, D. ¹ , Carroll, G. ² , Diamond, D. ¹ , ¹ CLARITY Centre for Sensor Web Technologies, ² EpiSensor Ltd.
9.50 – 10.15	Proof of Concept of an On-line Pump Scheduling and Control system Woodward, K.D. ¹ and Fowler, M. ² , ¹ United Utilities, ² Tynemarch Systems Engineering Ltd
10.15 – 10.40	Proven Process Control Strategies for Reducing OPEX Thornton, A., Murren, C. and Blayds, S., Hach Lange
10.40 – 11.05	Coffee Break & Exhibition (Garden Room)
INNOVATION & NOVEL PROCESSES <i>Redgrave</i> Chair – Ian Bernard, Technical Director, British Water	
11.05 – 11.30	Three Years Operation of a 270 MLD C-TECH SBR – Lessons for New Technologies Goronszy, M.C., Bisasco Pty Limited, Australia
11.30 – 11.55	Pilot Plant Trials of HYBACS Wastewater Treatment Process Hoyland, G. ¹ , Vale, P. ² , Jones, M. ² , ¹ Bluewater Bio Ltd, ² Severn Trent Water PLC
12.00 – 12.50	Plenary Session (Cinema 2)
12.50 – 13.50	Lunch & Exhibition (Garden Room)
13.50 – 14.15	Integrated Microbial and Algal Effluent Treatment (IMAET) Biotechnology for Biomangement of Liquid Effluent Ghatneker, S., Sharma, S.M., Ghatneker, S.S., Dighe, D.S., Biotechnology Resource Centre, India

14.15 – 14.40	<p>Presenting a New Wastewater Treatment Technology Based on a Case Study of a Full-Scale Plant in Hungary Szilágyi, N.^{1,2}, Kovács, R.¹, Kenyeres, I.¹, Csikor, Zs.², ¹Organica Technologies, Inc., Hungary, ²Budapest University of Technology and Economics, Hungary</p>
14.40 – 15.05	<p>Water and Wastewater Treatment with RECAM®: Case Studies and Future Development Aglietto, I., SA Envitech a.s., Czech Republic</p>
15.05 – 15.30	<p>Coffee Break & Exhibition (Garden Room)</p>
15.30 – 15.55	<p>On Site Ad – New Opportunities For Smaller Scale Plants Gueterbock, R., Clearfleau Ltd</p>
15.55 – 16.20	<p>Dissemination and uptake of EC Framework Programme water research results Thomas, K.¹, Midgley, S.², ¹Environmental Sustainability KTN (ESKTN), University of Oxford, ²International Office for Water (OIEau), France</p>
16.20 – 16.45	<p>Chemically Assisted Primary Sedimentation – a re-emerging technology as energy costs escalate? Koodie, T.¹, Foster, D.², Bowman, L.¹, Schauer, P.¹, Pearce, P.², ¹Black and Veatch, ²Thames Water Utilities Ltd</p>
16.45 – 17.10	<p>Looking for Synergistic Effects of Chemical Disinfectants and UV for a More Effective Water Treatment Vankerckhoven, E., Verbessem, B., Crauwels, S., Willems, K.A., Rediers, H., Katholieke Universiteit Leuven Association, Belgium</p>
<p>SWAN SMART WATER NETWORKS FORUM UK CONFERENCE Mozart</p>	
9.15 – 9.45	<p>The Smart Water Grid: State of the market and projections Seth Cutler, Research Analyst, Frost and Sullivan</p>
9.45 – 10.40	<p><u>Smart Water Case Studies</u></p> <p>Towards an intelligent water infrastructure: The Vitens approach Wilbert van De Ven, Process Technology Manager, Vitens</p> <p>Direct conservation – using information and incentives to save water Graham Symmonds¹ and Trevor Hill², ¹CTO, Global Water Resources, ²CEO, Global Water Resources</p>
10.40 – 11.05	<p>Coffee Break & Exhibition (Garden Room)</p>
11.05 – 11.55	<p>Swan Working Group Presentations</p>
12.00 – 12.50	<p>Plenary Session (Cinema 2)</p>
12.50 – 13.50	<p>Lunch & Exhibition (Garden Room)</p>
13.50 – 15.00	<p><u>Smart Water Case Studies</u></p>

	<p>Automated Meter Reading: Design and Implementation in Thames Water Dr. Ricardo Wissmann Alves, Innovation Metering Projects Manager, Thames Water</p> <p>Advanced Metering Infrastructure Gabriel Chegaray, Technical Director M2M, Orange / France Telecom</p> <p>Implementation of Real-time Solutions at United Utilities – Benefits and Challenges Kevin Woodward, Monitoring Control Automation Manager, United Utilities</p>
15.00 – 15.30	Coffee Break & Exhibition
15.30 – 16.00	Working Group Presentations and Proposals for Additional Tracks
16.00 – 17.00	<p><u>Smart Water Case Studies</u></p> <p>Touchdown at Twickenham Dr. Tim Evans, Senior Research Scientist, Thames Water, and Chris Hegley, Director of Business Development, Syrinix</p> <p>Utilising Data-Driven Technology to Enhance Leakage Detection Karl Moy, Leakage Operations Manager, Veolia Water</p> <p>Distribution System Energy Management and Operations Optimization at Gwinnett County, US Neal Spivey, Director Water Production, Gwinnett County DWR, and Simon Bunn, CTO , Derceto</p>
17.00 – 17.45	Afternoon Keynote and Closing Notes