

CONFERENCE PROGRAMME

NORDIC WASTEWATER CONFERENCE AARHUS, 10-12 OCTOBER 2017

Leading Nordic event for water professionals – experts and practitioners, managers and operators: utility staff, city planners, researchers, engineers, advisors and others with an interest in wastewater management and climate change adaptation in the Nordic region. Special focus this year on wastewater management in the Baltic Sea Region.



DANVA, SAMORKA, FIWA, Svenskt Vatten, Norsk Vann and IWA invite all water professionals with an interest in wastewater, sewage systems and climate change adaptation to **join us at NORDIWA 10 – 12 October 2017**



Welcome to Aarhus

- Second largest city in Denmark – the “capital” of Jutland and European Capital of Culture 2017
- Mentioned in World Energy Outlook 2016 for its leading wastewater treatment plant Marselisborg Renseanlæg. A WWTP that demonstrates the ability of the water sector to become energy neutral and beyond.
- Renowned for outstanding integrated solutions, where water management, and the opening of Aarhus River to the public, contributes to urban liveability
- A vibrant mix of youthful energy and a blast from the past, selected as a Top Destination – Best in Europe 2016 by Lonely Planet and praised by visitors including Tripadvisor for the city’s atmosphere and world-class museums including AROS, Museum of modern art, The Old Town and Moesgaard, Museum of ancient history



Conference programme NORDIWA 10 – 12 October 2017

Four main topics

NORDIWA presents a varied and interesting conference programme with four main topics:

1. New approaches to Wastewater treatment – Plants, Processes and Circular Economy	2. Sewer systems – models, management and integrated approaches	3. Adapting to consequences of a changing climate	4. Cross-cutting topics
---	--	--	--------------------------------

Who will attend

Participants in the NORDIWA conferences are water professionals – experts and practitioners. NORDIWA is an unique meeting place for utility staff, city planners, researchers, engineers and others with an interest in wastewater management and climate change adaptation in the Nordic region.



Mayor of Aarhus, Jacob Bundsgaard

We look forward to welcoming all of you to Aarhus for the Nordic Wastewater Conference 2017. In Aarhus we view water as a resource that supports our efforts to create a greener and bluer city – a city with plenty

of opportunities for healthy activities in everyday life. Liveability, open spaces, recreational areas and landscapes within reach are indispensable elements of our efforts to adapt Aarhus to climatic change.



CEO of Aarhus Water, Lars Schrøder

Aarhus Vand aims to be among the most advanced water companies in our region. Visitors get a chance to see this for themselves on technical tours at NORDIWA for instance when going to Marselisborg Wastewater Treatment Plant. This plant is in fact a power

station setting new technological and operational standards for energy production from wastewater. Visitors can also experience the results when taking a walk along Aarhus River, re-opened to the public thanks to improved water quality.



CEO of DANVA, Carl-Emil Larsen

Sharing knowledge among the Nordic countries has taken place at NORDIWA conferences since 1989. Learning from advanced water companies with high ambitions and standards gives us all an opportunity to improve our solu-

tions for the benefit of utilities and communities. This will help us all in taking water management to the next level and develop world class solutions in the Nordic region.



CEO of Svenskt Vatten, Anna Linusson

It is time to influence political leadership and consider the whole picture. The challenge of emerging substances cannot be solved only with end of pipe solutions. Focus on producers' responsibility is needed. If we want green pharmacy and

eco design, we should reward this by making it long-term profitable. I hope the conference in Aarhus will contribute to a more proactive approach on this issue.

Conference elements are:

- **Plenary sessions** with presentations and limited room for discussion. These sessions will provide overview and inspiration for the coming days.
- **Conference sessions** with in-depth knowledge about projects and findings, but with little room for discussion.
- **Poster sessions** with quick presentations and room for further discussions for both posters and poster presentations. The subjects of the poster sessions are coordinated with the conference sessions, and posters related to the subject will be shown at the conference sessions.
- **Workshops** facilitate knowledge sharing across countries in the Nordic and Baltic Sea region and across disciplines such as practitioners, researchers and authorities.

There is special focus on water management in the Baltic Sea region and, as a part of the conference, workshops and events are organised by and for Young Water Professionals.



10 OCTOBER 2017

10.00-11.00	Arrival and registration				
11.00-13.00	Opening session Centralværkstedet Chair: Carl-Emil Larsen, DANVA				
11.00-11.30	Welcome to NORDIWA: Drivers for innovation – The development in the water sector in the last 10 years. Carl-Emil Larsen, CEO, DANVA				
11.30-12.00	The Challenges: Involvement of the Polish water sector in the improvement of the Baltic Sea. Klara Ramm, Ph.D, Chair of EurEau Commission on Economics and Legal Affairs				
12.00-12.30	The Solutions: IWA activities promoting UN Sustainable Development Goals and securing clean water, adequate sanitation and sustainable cities. Tom Williams, Intern Executive Director				
12.30-13.00	The Actions: Cooperation to improve water management in the whole Baltic Sea region. Björn Grönholm, Head of Secretariat, Union of Baltic Cities, Sustainable Cities Commission				
13.00-14.00	Lunch at Centralværkstedet at Comwell or Centralværkstedet				
14.00-15.20	Future WWTP Centralværkstedet Chair: Tommi Fred, HSY	Nordic Innovation (WS) Lokale A – Comwell Chair: Daniel Hellström, Svenskt Vatten	Water reuse (WS) Lokale B – Comwell Chair: Helle Katrine Andersen, DANVA	Urban Solutions – for Climate change adaptation (WS) Lokale C – Comwell Chair: Anne Laustsen, Aarhus Vand	Renewal and maintenance (WS) Lokale D – Comwell Chair: Dorte Skæm, DANVA
14.00-14.20	Roadmap to 153% energy self-sufficiency at WWTP Per Overgaard Pedersen, Aarhus Vand A/S	Research and innovation is needed to develop resource efficient and sustainable solutions stormwater and wastewater management designed to cope with climate change. The progress and future efforts concerning R&D in the Nordic countries will be discussed with focus on what is needed to improve the innovation process within the water sector. Welcome to join the workshop if you would like to share ideas about how we can work together for an even more innovate approach to meet current and future challenges. Six guiding principles for radical innovation of WWTPs Inge Halkjær Jensen, Aarhus Vand Short presentations about research and innovation in Nordic countries Presentations from Arne Haarr, Norsk Vann, Osmo Seppälä, FIWA, Tanja Nielsen, DANVA, Daniel Hellström, Svenskt Vatten	Converting wastewater into fertilizing irrigation Niels Mikkelsen, Minor Change Group Aps Storm water replaces ground water for industrial wash. Christian Lundgaard Jensen, NIRAS Recovery of water resources from wastewater Herman Helness, SINTEF Sequential batch passive aeration greywater treatment Marina Bergen Jensen, Univeristy of Copenhagen Water management, climate adaptation and reuse of rainwater Carsten Fjorback, COWI and Kurt Brinkmann Kristensen, Aarhus Vand	Exit Utopia – Enter The Climate Laboratory Of Denmark Helle Baker, The Climate City, Middelfart Wastewater Utility How climate change can develop the city Esben Ravn Iversen, NIRAS Planning for the future through a Masterplan approach Anders Skovgård Olsen, Krüger A/S How climate adaptation redesigns cities Astrid Kock Grusgaard, Rambøll Icelandic experiences with urban climate change adaptation Fjóla Jóhannesdóttir, Veitur Stormwater management in Finland – New Legislation and its impacts Saijariina Toivikko, Finnish Water Norwegian experiences with climate change adaptation Magnar Sekse, Bergen Kommune Experience from Sweden – and Malmö on urban climate change adaptation Hans Bertil Wittgren, Va Syd, Sweden Water Research	The Danisch concept of CCTV Claus Vangsager, Per Aarsleff and Peter Hjortdal, Aarhus Vand Using lean to improve the handling of CCTV Morten Hass Rasmussen, EnviDan A/S Automated Image Learning to Improve Sewer Pipeline Inspection Tiia Lampola, Helsinki Region Environmental Services Authority Deterioration modelling of wastewater pipes Jon Røstum, Powel
14.20-14.40	Capacity development for the WWTPs in the area of Baltic sea – Case IWAMA Sami Luste, Lahti University of Applied Sciences				
14.40-15.00	Advanced control of WWTPs using fast DNA sequencing Mikkel Stokholm-Bjerregaard, Aalborg University/Krüger A/S				
15.00-15.20	WWTP in regional perspective, drivers in Malmö/Lund aera Ulf Nyberg, VA SYD				
15.20-16.00	Coffee break and networking at Comwell or Centralværkstedet				
16.00-17.20	NEW WWTP Centralværkstedet Chair: Mari Heinonen, HSY	Baltic Sea (WS) – Challenges and Experiences Lokale A – Comwell Chair: Saijariina Toivikko, FIWA	Managing data (WS) Lokale B – Comwell Chair: Linda Åmand, IVL Svenska Miljöinstitute	Cross-sector Cooperation for better adaptation Lokale C – Comwell Chair: Magnar Sekse, Bergen Kommune	Wastewater from industries (WS) Lokale D- Comwell Chair: Hans Bertil Wittgren, VA SYD/Sweden Water Research
16.00-16.20	Developing tailor-made simulation and process models Eppu Väänänen, Ramboll Finland Oy	Polish experiences with minimizing the negative influence of urban waste water for the Baltic Klara Ramm, Ph.D, Chair of EurEau Commission on Economics and Legal Affairs Pharmaceuticals in the Baltic Sea region – status report Niina Vieno, Law and Water Ltd Development of Wastewater Management in Lithuania and Finland Pekka Pietilä, Tampere University of Technology Energy audit concept reflecting energy-nutrient-nexus in BSR Stefan Rettig, Technische Universität Berlin	Present status of instrumentation at Swedish WWTPs Linda Åmand, IVL Swedish Environmental Research Institute Applying big data analytics to sewer network management Tomi Lukkarinen, HSY Visualization of key data for Greater CPH utilities Sten Lindberg, DHI	A new normal? Collaboration as the road to better adaptation Søren Møller Christensen, Rain & Cities A bumpy road to climate adaptation Bente Villumsen and Merle Enghoff, KLIKOVAND Transcending sectors – pooling visions and surging ahead Lars Nørgård Holmegaard, Lemvig Water & Wastewater, Denmark, Sarah Lund, Udenrigsministeriet	The cadmium challenge – a joint adventure Marcus Frenzel and Erik Forsberg, Käppala Association and Swedavia Nutrient removal and performance of microscreens for treatment of C-stage MBBR effluent wastewater from a dairy industry Mikael Sjölin, Veolia Water Technologies, Sweden Wastewater from fish processing industries as carbon source Mark de Blois, H2OLAND AB A tool to support upstream work Hans Bertil Wittgren, VA SYD/Sweden Water Research
16.20-16.40	Higher Environmental Performance in wastewater systems Jan Eilsø Nielsen, Assens Forsyning A/S				
16.40-17.00	Start-up of the new MBBR plant of Ruka Ski Resort Kristian Sahlstedt, Pöyry Finland Oy				
17.00-17.20	Denmark's first fully covered wastewater treatment plant Peter Underlin, Hillerød Spildevand	Developing sludge audit concept for the Baltic Sea region Markus Raudkivi, University of Tartu			
19.00-21.00	Reception at AROS				

11 OCTOBER 2017

9.00-9.40	Morning Plenary – New perspectives in Nordic water management Centralværkstedet Chair: Lars Schrøder, Aarhus Vand Anna Linusson , Executive Director, Svenskt Vatten: Producers responsibility as a means to improve Nordic water management: It is time to influence political leadership. The challenge of emerging substances can not only be solved with end of pipe solutions. We need to focus on producers and place responsibility where changes can take place. Petter D. Jenssen , Professor, Norwegian University of Life Sciences: Green cities – resource hubs in a circular economy: How emerging technologies and changed institutions can transform cities from importers of water, food, and energy from rural areas to important suppliers of fertilizer and soil amendment products in greener cities.
9.40-9.50	Short break – find your next session at Comwell or Centralværkstedet

11 OCTOBER 2017 – CONTINUED

	Poster Presentation Centralværkstedet Chair: Pedro Carvalho, Aarhus Universitet	Poster Only Centralværkstedet	Microplastic Lokale A – Comwell Chair: Anders Finnson, Svenskt Vatten	Digester/Bio gas production Lokale B – Comwell Chair: Arne Haar, Norsk Vann	Flood Protection Lokale C – Comwell Chair: Magnar Sekse, Bergen Kommune	Inflow and hydraulic modelling Lokale D – Comwell Chair: Tommi Fred, HSY
9.50–10.10	ICT, MONITORING		Partnership on Microplastics Hanne Lykkegaard, Danish Technological Institute	The Powerstep project Dines Thornberg, BIOFOS	A Cross-border Platform for Flood Risk Screening CEO, Morten Revsbæk, SCALGO	Model Predictive Control of Integrated Water Systems Henrik Madsen, DHI
	Monitoring of WWTPs performance by size-exclusion HPLC Alexey Ignatev, University of Jyväskylä MiDAS: database of microorganisms in AS and AD Marta Nierychlo, Aalborg University Process simulation as a method for strategic decision Lorenzo Benedetti, Water Ways d.o.o	A MODEL TO PREDICT PERFORMANCE OF DUAL-MEDIA REACTO Raul Rodriguez, WSP Sverige Predictive control of liquid level of WWTP inlet canal Finn Aakre Haugen, University College of Southeast Norway Advanced process control for biological nutrient removal Åsa Henriksson, Xylem Water Solutions Global Services AB				
10.10–10.30	WASTEWATER TREATMENT PROCESSES (NOVEL)		Beltfilter – potential of removing carbon and microplastics Sebastian Antonsen, Danish Technological Institute and Nerea Uri, VandCenter Syd (VCS Denmark)	Bergen municipality – Biogas – Experiences Kristine Akervold and Britt Mo, Bergen Municipality	Optimising SUDS ecosystems in urban environments Lærke Kit Sangill, VandCenter Syd Andrew Gordon Howe & Mone Chor Bjørn, University of Copenhagen	Keyzones Sewer David Getreuer Jensen, EnviDan A/S
	Evaluation of model-based design of BNR-processes Erik Lindblom, Stockholm Vatten och Avfall Resource Container as a Seasonal Solution for valorification Mona Arnold, VTT Granular sludge to enhance settleability Lise Havsteen, VandCenter Syd Wet Weather Trickling Filters for Improved Energy Footprint Per Henrik Nielsen, VandCenter Syd Phosphorus peaks in MBR effluent after membrane cleaning Erik Lindblom, IVL Swedish Environmental Research Institute	Aerobic granular sludge – opportunities and challenges Mark de Blois, H2OLAND Modeling the Selective Retention of Biomass by Hydrocyclones Nerea Uri, VandCenter Syd N-SEP is challenging fundamentals in wastewater treatment Stig Ovar Keller, Norwegian Technology AS Intensification of Nutrient Removal and Energy Reduction Fredrik Åkesson, GE Water & Process Technologies				
10.30–10.50	MICROPOLLUTANTS		Microplastic removal in Danish wastewater treatment plants Marta Simon, Aalborg University	Sundet resource recovery facility – three years with thermal digester effluent Anneli Andersson Chan, City of Växjö, Water and Sewerage Dept.	Correlating Climate Proofing Measures in DK-Ringkøbing Finn Jessen, Ringkøbing-Skjern Forsyning and Henning Lehmann Pedersen, NIRAS	Automatic data-correction of pumping stations Perttu Saarinen, HSY
	New design of the center construction of the clarifier Claes Barlebo, Middelfart Spildevand Removal of metals for improvement of sludge quality Ida Sylwan, Mälardalen University Contribution of heavy metals from clay in wastewater Kyrre Halvorsen, Trondheim kommune Biological removal of emerging micropollutants at 8 °C Antonina Kruglova, Aalto University					
10.50–11.10	PHARMACEUTICALS		Removal of microplastics from secondary effluent Julia Talvitie, Aalto university	Recovery of methane from anaerobic digester effluent Hamse Kjerstadius, Lund University	Making the most of Cloudburst Adaptation Strategies Maria Facchin Asmussen, Rambøll A/S	Design and Implementation of an Online Flood Warning System Nikolaj Mølbye, Küger A/S
	Fate of pharmaceuticals in sewage and sludge Jörgen Magnér, IVL Swedish Environmental Research Institute Removal of pharmaceuticals at wastewater treatment plants Karolina Furgal, Rambøll	Removal of antibiotic resistant E. coli in WWTPs Carsten Ulrich Schwermer, Norwegian Insitute for Water Research (NIVA) Characterization of airborne bacteria collected from a munic Jaeyoun Jang, Aarhus University MBBR for removal of pharmaceuticals Elena Torresi, Veolia Water Technology				
11.10–11.40	Coffee break and networking at Comwell or Centralværkstedet					
	Poster Presentation Centralværkstedet Chair: Maria Vietez Vazques, Aarhus Vand	Poster Only Centralværkstedet	Micropollutants Lokale A – Comwell Chair: Anders Finnson, Svenskt Vatten	Digester (WS) Lokale B – Comwell Chair: Arne Haar, Norsk Vann	Rain events and tormwater handling Lokale C – Comwell Chair: Maria Viklander, Luleå University of Technology	Weather Forecast models (WS) Lokale D – Comwell Chair: Dorte Skræm, DANVA
11.40–12.00	ADAPTING TO A CHANGING CLIMATE		Organic micropollutants in household wastewater Cajsa Wahlberg, Stockholm Vatten och Avfall	Online monitoring of Anaerobic Digesters Nicholas Mcleod Balsgart, NanoNord A/S Alternative temperature control structures of an AD reactor Shadi Attar, University College of Southeast Norway Nitrogen harvesting from reject water – A new energy efficient technology Juho Kaljunen, Aalto University, Finland	New cloudburst roads Julie Linke Bank, VANDVEJEN	Experiences with X-band weatherradar quality in Copenhagen Peter Rasch, InforMetics Urban runoff forecasting with ensemble weather predictions Jonas Wied Pedersen, Department of Environmental Engineering, Technical University of Denmark www.aalborgvejrradar.dk – Cloudburst Documentation Mette Godsk Nicolajsen, Aalborg Kloak
	A climate resilient NYC with Blue-Green Infrastructure Maria Facchin Asmussen, Rambøll A/S SPARK-project, Development of the Marselisborg Center Anne Laustsen, Aarhus Vand A/S Masterplan Fovrfeld Ådal Ulla Lyngs Ladekarl, Niras					
12.00–12.20	ADAPTING TO A CHANGING CLIMATE		How Efficient is our Upstream Management? Case study Gryaab Ann Mattsson, Gryaab			
	Separating rainwater from wastewater Anne Laustsen, Aarhus Vand A/S Estimating co-benefits of preventing cities from flooding Camilla K. Damgaard, Niras	Cloudburst adaptation in suburban areas – learn from Lystrup Peter Bassø Duus, Orbicon				

CONTINUED ➤

11 OCTOBER 2017 – CONTINUED

	Poster Presentation Centralværkstedet Chair: Maria Vietez Vazques, Aarhus Vand	Poster Only Centralværkstedet	Micropollutants Lokale A – Comwell Chair: Anders Finnson, Svenskt	Digester (WS) Lokale B – Comwell Chair: Arne Haar, Norsk Vann	Rain events and stormwater handling Lokale C – Comwell Chair: Maria Viklander, Luleå University of Technology	Weather Forecast models (WS) Lokale D – Comwell Chair: Dorte Skræm, DANVA
12.20–12.40	SEWAGE SYSTEMS AND MANAGEMENT		Contaminants in sewage and recipients of four Nordic cities Gudjón Atli, Innovation Center Island	High loaded anaerobic digestion with short HRT – pilot trial Sofia Andersson, Stockholm Vatten och Avfall Performance survey of 46 Danish anaerobic digesters Martin Hjorth Andersen, Aalborg University Organic waste to WWTP – is it a good idea? Jacob Kragh Andersen, EnviDan A/S	Discharge to Already Hydraulic Overloaded Streams Alex Torpenholdt Jørgensen, Krüger	
	Strategic reduction of inflow/infiltration to sewage systems Jan Scheel, NIRAS Using management systems the smart way Marcus Müller, COWI Future-protection of stormwater management in Tarm Julie Lisa Magnusen and Melanie Jette Sønderup, Ringkøbing-Skjern Forsyning and Rambøll	Managing Big Data in future utilities Anja Veldt, ARTOGIS a/s Optimising KPIs, Risk and Cost for Sewer Infrastructure Christian Schmidt Berthelsen, SEAMS Overview of Investment requirements in Næstved Carsten Jakobsen, Krüger A/S				
12.40–13.00	SEWAGE SYSTEMS AND MANAGEMENT		Toxicity removal during wastewater treatment Pia Vällitalo, Aalto University		Water retention on non-vegetated roofs in nordic climates Vladimir Hamouz, NTNU	
	Performance Benchmarking as a tool to improve dialogue Jóannes Jørgen Gaard and Christian Rosen Balder, Miljøstyrelsen and NIRAS Use of a screening method to boost information from CCTV-ins Tiia Lampola, Helsinki Region Environmental Services Authority Quantifying green surface rain runoff in urban catchments Kristoffer Nielsen, Aalborg University	Modeling and control of pumps with flow equalization Rasmus Jemander, Uppsala University				
13.00–14.00	Lunch at Centralværkstedet					
	Poster Presentation Centralværkstedet Chair: Mathias Thuborg, Aarhus Universitet	Poster Only Centralværkstedet	Pharmaceuticals Lokale A – Comwell Chair: Sajjariina Toivikko, FIWA	Phosphorus recovery Lokale B – Comwell Chair: Per Halkjær, AAU	Pollutants in ecosystems and stormwater Lokale C – Comwell Chair: Katrine Nielsen, DTU	Decision support Lokale D – Comwell Chair: Niels Bjerregaard, DANVA
14.00–14.20	ENERGY AND GHG		Pharmaceuticals and micro plastics in waste water treatment Anna Maria Sundin, Swedish Environmental Protection Agency	Danish phosphorus strategy and P-recovery Linda Bagge, Danish Environmental Protection Agency	Controlling storm water discharge respecting stream capacity Anja Thrane Hejselbæk Thomsen, Orbicon and Aalborg University	Implementation and Experiences of the SSP in Helsinki Region Johanna Castrén, Helsinki Region Environmental Services Authority HSY
	Power-to-Gas integrations at wastewater treatment plants Robert Weiss, VTT Technical Research Centre of Finland Low nitrous oxide production in nitrification reactors Qingxian Su, Department of Environmental Engineering, Technical University of Denmark Circular economy in sustainable wastewater management Riikka Laitiola, Environmental School of Finland SYKLI	Achieving Energy Savings and More with VFDs Christina Rugaard Høyer, ABB A/S				
14.20–14.40	SLUDGE AND CIRCULAR ECONOMY		Mermis Niels Møller Jensen, Herning Vand	RAVITA- A new method for phosphorus recovery from wastewater Laura Rossi, Helsinki Region Environmental Services Authority HSY	Effects of delayed stormwater on biodiversity in streams Lukasz Koziel, University of Southern Denmark	Pin-sharp prioritizing of sewer rehabilitation tasks Lotte Neve og Johan Harkjær Kristensen, NIRAS
	The Circular Economy Approach to Wastewater Treatment Bjarne Bro, Billund Vand Results from Hydro Thermal Carbonisation (HTC) of sludge Erik Odén, C-Green A novel gasification strategy for wastewater sludge Torben Lund Skovhus, VIA University College					
14.40–15.00	ANAMMOX		Clear Waters from Pharmaceuticals, CWPharma Robert Sehlén, Tekniska verken i Linköping AB	Side Stream Hydrolysis and EBPR at Swedish WWTPs Tobias Salmonsson, Stockholm Vatten och Avfall & Stefan Erikstam, Käppalaförbundet	Separation of microplastics in road runoff Philipp Lau, TU Berlin, Department of Urban Water Management	Data driven asset management: Operate, maintain or invest? Henrik Laursen, Randers Spildevand, og Peter Hartwig, Kouno.
	N2O production and mitigation in Partial Nitrification-Anammox Jan-Michael Blum, Technical University of Denmark, Department of Environmental Engineering Mainstream Deammonification with ANITA Mox Process Dora Stefansdottir, Veolia Water Technologies – AnoxKaldnes Anammox process nitrite inhibition and nitrite-adaption Ivar Zekker, University of Tartu					
15.00–15.20	MICROPLASTIC		Full-scale treatment of hospital wastewater Ulf Nielsen, DHI	Full scale P-recovery based on struvite production Peter Balslev, Aarhus Vand A/S	Microplastic in Danish storm water ponds Kristina B. Olesen, Department of Civil Engineering, Aalborg University, Denmark	
	Plastic free fjords in Denmark Stine Lundbøl Vestergaard, EnviDan A/S and Claudia Sick, Plastic Change					
15.20–15.50	Coffee break and networking at Comwell or Centralværkstedet					

CONTINUED ➤

11 OCTOBER 2017 – CONTINUED

	Small treatment plants (WS) Centralværkstedet Chair: Petter Jensen, Norwegian University of Life Sciences	Hydrogen sulphide (WS) Centralværkstedet Chair: Niels Peter Revsbeck, AU	Recruiting and managing the work force of tomorrow (WS) Balcony – Centralværkstedet Chair: Jan-Michael Blum, DTU	Anammox Lokale A – Comwell Chair: Lise Hughes, Aarhus vand	P-recover workshop (WS) Lokale B – Comwell Chair: Per Halkjær, AAU	Streamlining sustainable stormwater management – data, tools, pollutants and legislation (WS) Lokale C – Comwell Chair: Katrine Nielsen, DTU	Hydraulic modelling (WS) Lokale D – Comwell Chair: Kristian Friis, DANVA
15.50- 16.10	Reduced environmental impact from small wastewater treatment Ingrid Palmblad Örlander, City of Växjö, Dept. of Water and Sewerage MBBR and activated sludge: 1 + 1 = 3? Mark de Blois, H2OLAND AB	Novel sensor technology for sulphide monitoring in sewers Ebbe Kruse Vestergaard, Unisense A/S Hybrid filter technology for treating sewer odor Asbjørn Haaning Nielsen, Aalborg University	How do we convince young people to pursue a career in the water sector? How do we create attractive workplaces to retain employees? Kick off talk by work psychologist Einar Baldvin Baldursson from Aalborg University, followed by an open group discussions among junior and senior water professionals. Outcome will be highlighted and summarized in a final panel discussion. Organized by Young Water Professionals from the Nordics.	Four years of piloting-mainstream nitrification-anammox Frank Persson, Chalmers University of Technology	Ash2®Phos – Clean commercial products from sludge ash Yariv Cohen, EasyMining Sweden A robust alternative to sustainable phosphorus recycling Mette Dam Jensen, Krüger A/S Phosphorus recovery from sludge – a new technology Hanne Lækkegaard and Morten Lykkegaard Christensen, Danish Technological Institute and Aalborg University Slamförbränning med fosfor återvinning Rafea Naif Majeed Al-Sabti, Sandviken Energi Vatten AB Which phosphorus recovery solution would you choose? Bengt Hansen, Kemira Kemi AB	How do we create a more uniform stormwater management, which takes data, tools, pollutants and legislation into account and also works for the industry, municipalities, utilities and universities? The workshop will be kicked off by presentations from industry, universities and utilities, addressing some of the problems seen today with stormwater management. The presentations will be followed by an open discussion. This workshop presents a possibility to contribute to the discussion and listen to opinions and ideas from others about the future of sustainable stormwater management. Organized by Technical University of Denmark	Analysis/Plan of Separat- & Centralising of Drainage systems Sabah Al-Shididi, MT Højgaard Continuous measurement of elements for wastewater monitoring Heini Postila, University of Oulu Isolating infiltration using neural networks Lasse Børresen, InforMetics A Novel Approach to Tracking Sewer Inflow and Infiltration Morten Grum, WaterZerv
16.10- 16.30	Effect of screened domestic sewage on receiving waters Guðjón Atli Auðunsson, Innovation Center Iceland	Kinetics of sulfide precipitation using iron salts Bruno Kiilerich, Aalborg University/Grundfos Holding A/S		Anammox Activity in the Main- and Sidestream at Marselisborg Mikkel Holmen Andersen, DHI			
16.30- 16.50	Trickling filter disasters at the west coast of Sweden Mark de Blois, H2OLAND AB	In situ assessment of surface pH of corroding sewer pipes Asbjørn Haaning Nielsen, Aalborg University		Full scale operation of DeAmmon® N-removal from reject water Morten Rostad Haugen, Bekkelaget Vann AS			
16.50- 17.10				Piloting the ANITAMox – process for reject water treatment Anna Kuokkanen, Helsinki Region Environmental Services Authority HSY			
19.00	Conference Dinner at Centralværkstedet						

12 OCTOBER 2017

	Wastewater treatment process Lokale A – Comwell Chair: Lise Hughes, Aarhus Vand	Managing our wastewater system Lokale B – Comwell Chair: Bertel Ifversen, DANVA	Managing & analyzing climate solutions Lokale C – Comwell Chair: Sigurjón Norberg Kjærnsted, SAMORKA
9.00- 9.20	Improving the capacity of Käppala WWTP by using cyclones Sari Vienola, Käppalaförbundet	Practical approach to set-up an asset management system Christian Schmidt Berthelsen, BIOFOS	Holistic stormwater and climate adaptation management Trine Stausgaard Munk, Ramboll
9.20- 9.40	Long-time experiment with biological active filter (BAF) Christian Baresel, IVL Swedish Environmental Research Institute	Asset Management for 1,500 km Sewer System Benny Nielsen, Herning Water A/S	Assessing profitability of cloudburst management investments Helena Åström, Orbicon A/S
9.40- 10.00	Continuous Biofilm Nutrient Removal Process – One Year Of Full Scale Operation Torgeir Saltnes, Hias IKS	Asset Management in VCS Denmark Arne Svendsen, VCS Denmark	Cloudburst management plan – experience from Herlev Jørn Bjarke Torp Pedersen, Orbicon A/S
10.00- 10.20	Applying a Disruptive Technology: Practical Considerations Per Henrik Nielsen, VandCenter Syd	Managing our wastewater system – the Sustainability Index Magnus Montelius, Svenskt Vatten	CBA for deciding local flood protection levels Jan Jeppesen, EnviDan A/S
10.20- 11.00	Coffee break and networking		
	Energy efficient/GHG emission Lokale A – Comwell Chair: Niels Peter Revsbeck, Aarhus Universitet	Partnering and cooperation Lokale B – Comwell Chair: Kristian Friis, DANVA	Designing innovative water sensitive urban solutions (WSUD)/LAR Lokale C – Comwell Chair: Miriam Feilberg, DANVA
11.00- 11.20	Käppala WWTP future – Carbon neutral and Energy positive Catharina Grundestam, Käppala Association	Partnering – a new way of working and innovating Lone Bejder, Favrskov Forsyning and Stine Hjortshøj Lajer, VAM	Safe recreational lake waters Stig Jonassen, Skanderborg Forsyningsvirksomhed and Lotte Bjerrum Friis-Holm, Danish Technological Institute
11.20- 11.40	Towards GHG-emission compensating WWTPs Jannice Örnmark, Syvab, Himmerfjärdsverket	Wastewater treatment 2040 – How to get there? Tor Gunnar Jantsch, Frevar KF	Detention basins in Virum Nina Caspersen, Lyngby Taarbæk Forsyning A/S
11.40- 12.00	Modelling nitrous oxide emissions at a full-scale WWTP Kati Blomberg, Aalto University	MinKloak.dk – a separate sewerage website for citizens and sewer professionals in Aalborg Mette Godsk Nikolajsen, Aalborg Kloak A/S	Future holistic storm water and sewage handling in Aarhus Lene Bassø Duus, Aarhus Vand
12.00- 12.20	Climate neutral sidestream control strategies and models Mikkel Holmen Andersen, DHI		Climate adjustment and CO₂ savings goes hand-in-hand Palle Mørkøre, Blue Kolding & Lene Jæger Klausen, Kolding Kommune
12.20- 12.45	Closing of the conference – and welcome to next NORDIWA conference Lokale A – Comwell		
	Helle Katrine Andersen, Danish IWA National Committee: NORDIWA – an important stepping stone towards IWA World Water Congress and Exhibition in Copenhagen in 2020 Sajariina Toivikko, Finnish Water Utilities Association: Welcome to next Nordic Wastewater Conference in Helsinki in 2019 Helle Kayerød, DANVA: Conference wrap-up, lessons learned and input to future NORDIWA conferences		
12.45- 13.00	Lunch to go		
13.00- 16.00	Technical tours Billund Biorefinery • Aalborg WWTP East • Climate change adaptatin tour in Aarhus • Marselisborg WWTP in Aarhus		

Practical information including price

- Conference Fee – Early Bird Discount until 31 August – 7.493,75 DKK (incl VAT)
- Standard Conference fee – 8.118,75 DKK (incl VAT) – Conference fee for presenters – 4.993,75 DKK (incl VAT)
- Conference registration: www.nordiwa.org
- Conference fee includes Opening Reception and Conference Dinner.
- Information about hotel booking and being a tourist in Aarhus: www.visitaarhus.dk/turist-i-aarhus
- Conference language is English

Conference Venue

The conference will be held at the four-star hotel Comwell Aarhus, close to the city centre and central station and Centralværkstedet, former train workshop, praised for its atmosphere and wonderful food. Conference dinner will take place at Centralværkstedet.



Technical tours & Social programme

- On Oct. 12 we organise technical tours with the opportunities to visit wastewater treatment plants in Billund, Aarhus or Aalborg or a Climate tour to different sites in Aarhus.
- Reaching international flights can be combined with a visit to Billund Biorefinery and Aalborg, where busses will take you from the technical tour sites to the nearby airports.
- Marselisborg Wastewater Treatment Plant.
- Billund Biorefinery.
- Aalborg Øst Wastewater Treatment Plant, Environment and Energy Project.
- Climate tour Aarhus.
- Social programme consists of:
 - Day 1: Opening Reception at AROS Art Museum
 - Day 2: Conference Dinner at Centralværkstedet

PROGRAMME COMMITTEE

Daniel Hellström	IWA (Svenskt Vatten)
Anders Finnson	Svenskt Vatten
Helle Kayerød	DANVA
Dorte Skræm	DANVA
Miriam Feilberg	DANVA
Lise Hughes	IWA (Aarhus vand)
Saijariina Toivikko	FIWA
Tommi Fred	IWA
Sigurjón Norberg Kjærnested	Samorka, Island
Gjertrud Eid	Norsk Vann
Magnar Sekse	IWA (Bergen kommune)
Peter Steen Mikkelsen	DTU, Denmark
Per Halkjær Nielsen	Aalborg University
Niels Peter Revsbech	Aarhus University

Technical tours
powered by:

AALBORG KLOAK

aarhusvand

AALBORG VANDKONCERN

**Billund
BioRefinery**
Resource Recovery for the Future

ORBICON

EnviDan

KRÜGER VEOLIA

For more information www.nordiwa.org