

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**



SAMORKA

 \bigcirc DANVA

Norsk Vann

FIWA Vsvenskt Vatten

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



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 indispen-sable 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 programme NORDIWA 10 – 12 October 2017

Four main topics

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

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

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

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10.00-11.00	Arrival and registration		
11.00-13.00	Opening session Centralværkstedet		
11.00-11.30	Welcome to NORDIWA: Drivers for innovation - The development in the water sector the last 10 years. Carl-Emil Larsen, DANVA		
11.30-12.00	The challenges: Water challenges	s around the Baltic Sea.	
12.00-12.30	The solutions: IWA activities pror sustainable cities. Tom Williams, IWA	noting UN Sustainable Development Goals and	securing clean water, adequate sanitation and
12.30-13.00	The actions: Improving cooperati Representative of Nordic Council	on in the water sector, strategies to promote in	ncreased innovation and securing funding,
13.00-14.00	Lunch at Centralværkstedet		
14.00-14.20	Future WWTP Centralværkstedet	Nordic Innovation (WS) Lokale A – Comwell	Water reuse (WS) Lokale B – Comwell
14.20-14.40	Roadmap to 153% energy self-sufficiency at WWTP Per Overgaard Pedersen, Aarhus Vand A/S	Six guiding principles for radical innovation of WWTPs Mikkel A. Thomassen, Smith Innovatiom	Converting wastewater into fertilizing irrigation Niels Mikkelsen, Minor Change Group Aps Storm water replaces ground water for industrial wash.
14.40-15.00	Capacity development for the WWTPs in the area of Baltic sea - Case IWAMA Sami Luste, Lahti University of Applied Sciences		Christian Lundgaard Jensen, NIRAS Recovery of water resources from wastewater Sveinung Sægrov/Blanca Silva, NTNU Sequential batch passive aeration greywater treatment
15.00-15.20	Advanced control of WWTPs using fast DNA sequencing Mikkel Stokholm-Bjerregaard, Aalborg University/Krüger A/S		Marina Bergen Jensen, Univeristy of Copenhagen Water management, climate adaptation and reuse of rainwater Carsten Fjorback, COWI
14.00-15.20	WWTP in regional perspective, drivers in Malmö/Lund aera Ulf Nyberg, VA SYD		
15.20-16.00	Coffee break and networking		
16.00-17.30	NEW WWTP Centralværkstedet	Baltic Sea (WS) Lokale A – Comwell	Managing data Lokale B – Comwell
16.00-16.20	Developing tailor-made simulation a nd process models Eppu Väänänen, Ramboll Finland Oy	Pharmaceuticals in the Baltic Sea region – status report Niina Vieno, Law and Water Ltd Development of Wastewater Management	Present status of instrumentation at Swedish WWTPs Linda Åmand, IVL Swedish Environmental Research Institute
16.20-16.40	Denmark's first fully covered wastewater treatment plant Peter Underlin, Hillerød Spildevand	in Finland Tapio S. Katko, Tampere University of Technology Development of wastewater treatment in Lithuania nad Finland Pekka Pietilä, Tampere University of Technology Energy audit concept reflecting energy-	Uncertain reference samples for online sensor calibration Oscar Samuelsson, IVL Svenska Miljöinstitutet
16.40-17.00	Start-up of the new MBBR plant of Ruka Ski Resort Kristian Sahlstedt, Pöyry Finland Oy		Applying big data analytics to sewer network management Tomi Lukkarinen, HSY
17.00-17.20	Higher Environmental Perfor- mance in wastewater systems Jan Eilsø Nielsen, Assens Forsyning A/S	nutrient-nexus in BSR Stefan Rettig, Technische Universität Berlin Developing sludge audit concept for the Baltic Sea region Markus Raudkivi, University of Tartu	Visualization of key data for Greater CPH utilities Sten Lindberg, DHI
19.00-21.00	Reception at AROS		
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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 managem influence political leadership. The challenge of emerging substances can not only be solved with end of pipe solutions. We 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: Ho technologies and changed institutions can transform cities from importers of water, food, and energy from rural areas to ir of fertilizer and soil amendment products in greener cities. 	
9.40-9.50	Short break – find your next session at Comwell or Centralværkstedet

Exit Utopia - Enter The Climate Laboratory Of Denmark Helle Baker, The Climate City, Middelfart Wastewater UtilityPipe Inspection Thomas B. Moeslund, Aalborg UniversityHow climate change can develop the city Esben Ravn Iversen, NIRASUsing lean to improve the handling of CCTV Morten Hass Rasmussen, EnviDan A/SPlanning for the future through a Masterplan approach Anders Skovgård Olsen, Krüger A/SAutomated Image Learning to Improve Sewer Pipeline Inspection Tiia Lampola, Helsinki Region Environmental Services AuthorityHow climate adaptation redesigns cities Astrid Kock Grusgaard, RambøllDeterioration modelling of wastewater pipes Jon Røstum, Powel	Renewal and maintenance (WS) Lokale D - Comwell
Esben Ravn Iversen, NIRASMorten Hass Rasmussen, EnviDan A/SPlanning for the future through a Masterplan approach Anders Skovgård Olsen, Krüger A/SAutomated Image Learning to Improve Sewer Pipeline Inspection Tiia Lampola, Helsinki Region Environmental Services AuthorityHow climate adaptation redesigns citiesDeterioration modelling of wastewater pipes	
Anders Škovgård Olsen, Krüger A/S Tiia Lampola, Helsinki Region Environmental Services Authority How climate adaptation redesigns cities Deterioration modelling of wastewater pipes	
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Cross-sector Cooperation for better adaptation Lokale C - Comwell	Wastewater from industries (WS) Lokale D- Comwell
A new normal? Collaboration as the road to better adaptation Søren Møller Christensen, Rain & Cities	Harnessing industrial CO ₂ emissions to neutralize water poll Hans Carlsson, Ramböll Sverige AB The cadmium challenge – a joint adventure
A bumpy road to climate adaptation Bente Villumsen and Merle Enghoff, KLIKOVAND	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
Transcending sectors – pooling visions and surging ahead Lars Nørgård Holmegaard, Lemvig Water & Wastewater, Denmark	Wastewater from fish processing industries as carbon source Mark de Blois, H2OLAND AB A tool to support upstream work
Climate Proofing at Grundfos, Collaboration Across Klaus E. Christensen and Thomas Møller Schmidt, Grundfos and Viborg Kommune	Hans Bertil Wittgren, VA SYD/Sweden Water Research

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	Poster Presentation Centralværkstedet	Poster Only Centralværkstedet		
9.50-10.10	ICT, MONITERING			
	Monitoring of WWTPs performance by size-exclusion HPLC Alexey Ignatev, University of Jyväskylä	A MODEL TO PREDICT PERFORMANCE OF DUAL-MEDIA REACTO Raul Rodriguez, WSP Sverige		
	MiDAS: database of microorganisms in AS and AD Marta Nierychlo, Aalborg University	Predictive control of liquid level of WWTP inlet canal Finn Aakre Haugen, University College of Southeast Norway		
	Process simulation as a method for strategic decision Lorenzo Benedetti, Water Ways d.o.o	Advanced process control for biological nutrient removal Åsa Henriksson, Xylem Water Solutions Global Services AB		
10.10-10.30	WASTEWATER TREATMENT PROCESSES (NOVEL)			
	Evaluation of model-based design of BNR-processes Sofia Andersson, Stockholm Vatten och Avfall	Aerobic granular sludge – opportunities and challenges Mark de Blois, H2OLAND		
	Resource Container as a Seasonal Solution for valorification Mona Arnold, VTT	Modeling the Selective Retention of Biomass by Hydrocyclones Nerea Uri, VandCenter Syd		
	Granular sludge to enhance settleability Lise Havsteen, VandCenter Syd	N-SEP is challenging fundamentals in wastewater treatment Stig Ovar Keller, Norwegian Technology AS		
	Rotating Belt Filter (RBF) for CEPT Subhash S Rathnaweera, Aquateam COWI	Intensification of Nutrient Removal and Energy Reduction Fredrik Åkesson, GE Water & Process Technologies		
	Wet Weather Trickling Filters for Improved Energy Footprint Per Henrik Nielsen, VandCenter Syd			
	Phosphorus peaks in MBR effluent after membrane cleaning Sofia Lovisa Andersson, IVL Swedish Environmental Research Institute			
10.30-10.50	MICROPOLUTANTS			
	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			
	Fate of pharmaceuticals in sewage and sludge Jörgen Magnér, IVL Swedish Environmental Research Institute	Unique and cost-effective treatment of Hospital Wastewater Bjarne Johannessen, Grundfos BioBooster A/S		
	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				
	Poster Presentation	Poster Only		
	Centralværkstedet	Centralværkstedet		
11.40-12.00	ADAPTING TO A CHANGING CLIMATE			
	A climate resilient NYC with Blue-Green Infrastructure Maria Facchin Asmussen, Rambøll A/S	Coastal and Climate Mitigation with the Water Family Tree		
	SPARK-project, Development of the Marselisborg Center Anne Laustsen , Aarhus Vand A/S	Linne Lauesen, HydroSystems Aps		
	Soul of Nørrebro – Innovative urban storm water management Michael Fabritius Tengnagel, Rambøll Water			
	Masterplan Fovrfeld Ådal Ulla Lyngs Ladekarl, Niras			
12.00-12.20	ADAPTING TO A CHANGING CLIMATE			
	Separating rainwater from wastewater Anne Laustsen, Aarhus Vand A/S			
	Life cycle analysis of adsorbents for stormwater treatment Aamir Ilyas, NTNT-Norwegian University of Science & Technology			
	Estimating co-benefits of preventing cities from flooding			

Microplastic Lokale A – Comwell	Digester/Bio gas production Lokale B - Comwell	Flood Protection Lokale C - Comwell	Inflow and hydraulic modelling Lokale D – Comwell
Microplastics in the wastewater cyclewater, sludge and soil Emma Fältström, Sweden Water Research AB	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 Lisbeth Birch Pedersen, DHI
Beltfilter – potential of removing carbon and microplastics Hanne Løkkegaard and Nerea Uri Danish Technolgical Insti- tute and VandCenter Syd	Bergen municipality – Biogas – Experiences Kristine Akervold og Britt Mo, Bergen Municipality	Optimising SUDS ecosystems in urban enviorements Lærke Kit Sangill, VandCenter Syd	Keyzones Sewer David Getreur Jensen, EnviDan A/S
Microplastic removal in Danish wastewater treatment plants Marta Simon, Aalborg University	Sundet resource recovery facility – three years with thermal Anneli Andersson Chan , City of Växjö, Water and Sewerage Dept.	Correlating Climate Proofing Measures in DK-Ringkøbing Henning Lehmann Pedersen, NIRAS	Automatic data-correction of pumping stations Perttu Saarinen, HSY
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

Micropollutants Lokale A – Comwell	Digester (WS) Lokale B – Comwell	Rain events and stormwater handling Lokale C – Comwell	Weather Forecast models (WS) Lokale D – Comwell
Organic micropollutants in household wastewater Cajsa Wahlberg, Stockholm Vatten och Avfall How Efficient is our Upstream Management? Case study Gryaab Ann Mattsson, Gryaab	Online monitoring of Anaerobic Digesters Søren Jørgensen, 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 Influence of calcium nitrate disage on anaerobic digestion Wolfram Franke, Yara International ASA Methane gas production in relation to an extended SRT in AS Niclas Åstrand, Sweco Environment AB	New cloudburst roads Julie Linke Bank, VANDVEJEN Types of Rain Implemented in Hydraulic Modelling Evaluation Sabah Al-Shididi, Hillerød Forsyning	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 Vejlby/Risskov - Probability for occurrence of extreme rain Anders Gade, EnviDan A/S Review of spatial rainfall measurements for decision making Peter Rasch, InforMetics

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	Poster Presentation	Poster Only		
	Centralværkstedet	Centralværkstedet		
2.20-12.40	SEWAGE SYSTEMS AND MANAGEMENT			
	Strategic reduction of inflow/infiltration to sewage systems Jan Scheel, NIRAS	DEM-CFD Simulation of Sediment Transport in Sewers Maryam Alihosseini, Technische Universität Berlin		
	Using management systems the smart way Marcus Müller, COWI	Managing Big Data in future utilities Anja Veldt, ARTOGIS a/s		
	Forecasting inflow using neural networks on rain gauges Peter Rasch, InforMetics	Optimising KPIs, Risk and Cost for Sewer Infrastructure Richard Hawkins, SEAMS		
	Future-protection of stormwater management in Tarm Julie Lisa Magnusen and Charlotte Sinkbæk Schow, Ringkøbing-Skjern For- syning and Rambøll	Overview of Investment requirements in Næstved Carsten Jakobsen, Krüger A/S		
2.40-13.00	SEWAGE SYSTEMS AND MANAGEMENT	1		
	Modeling and control of pumps with flow equalization Rasmus Jemander, Uppsala University	Cross border optimization of wastewater structures Ole Godsk Dalgaard, COWI A/S		
	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			
3.00-14.00	Lunch at Centralværkstedet			
	Poster Presentation	Poster Only		
	Centralværkstedet	Centralværkstedet		
4.00-14.20	ENERGY AND GHG			
	Power-to-Gas integrations at wastewater treatment plants Robert Weiss, VTT Technical Research Centre of Finland	N2O dynamics: experimental and modelling lab-scale results		
	Low nitrous oxide production in nitritation reactors Qingxian Su, Department of Environmental Engineering, Technical University of Denmark	Carlos Domingo-Felez, DTU – Environment Achieving Energy Savings and More with VFDs James Chalmers, ABB A/S		
	Circular economy in sustainable wastewater management Mia O\Neill, Environmental School of Finland SYKLI			
	Energy savings at a WWTP operated with intermittent aeration Niclas Åstrand, Sweco Environment AB			
14.20-14.40	SLUDGE AND CIRCULAR ECONOMY			
	The Circular Economy Approach to Wastewater Treatment Biarne 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			
	Strategies for maximising primary sludge hydrolysis rates Elin Ossiansson, VA SYD			
4.40-15.00	ΑΝΑΜΜΟΧ			
	N2O production and mitigation in Partial Nitritation-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			
5.00-15.20	MICROPLAST	1		
	Plastic free fjords in Denmark Stine Lundbøl Vestergaard, EnviDan A/S			
	Instruments, methods and results for microplastic analysis Sebastian Antonsen, Danish Technological Institute			
15.20-15.50	Coffee break and networking			

Micropollutants Lokale A – Comwell	Digester (WS) Lokale B – Comwell	Rain events and stormwater handling Lokale C – Comwell	Weather Forecast models (WS) Lokale D – Comwell
	High loaded anaerobic digestion with short HRT - pilot trial Erik Lindblom, 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		
Toxicity removal during wastewater treatment Pia Välitalo, Aalto University		Water retention on non- vegetated roofs in nordic climates Vladimir Hamouz, NTNU	

Pharmaceuticals Lokale A – Comwell	Phosphrus recovery Lokale B – Comwell	Pollutants in ecosystems and stormwater Lokale C - Comwell	Decision support Lokale D – Comwell
Pharmaceuticals and micro plastics in waste water treatment Anna Maria Sundin, Swedish Environmental protection agency	Danish phosphorus strategy and P-recovery Linda Bagge, Miljøstyrelsen	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
Mermiss 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, NIRAS
Clear Waters from Pharmaceuticals, CWPharma Robert Sehlén, Tekniska verken i Linköping AB	Side Stream Hydrolysis and EBPR at Swedish WWTPs Tobias Salmonsson and Stefan Erikstam, Svoa and Kappala	Separation of microplastics in road runoff Daniel Venghaus, TU Berlin, Department of Urban Water Management	Data driven asset management: Operate, maintain or invest? Michael Sønder Jensen, Randers Spildevand
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	

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	Small treatmentplants (WS) Centralværkstedet	Hydrogen sulphide (WS) Centralværkstedet	Young Water Professionals (Workshop) Centralværkstedet
15.50- 16.10 16.10- 16.30 16.30- 16.50 16.50- 17.10	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 Effect of screened domestic sewage on receiving waters Guðjón Atli Auðunsson, Innovation Center Iceland Trickling filter disasters at the west coast of Sweden 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 Kinetics of sulfide precipitation using iron salts Bruno Kiilerich, Aalborg University/Grundfos Holding A/S In situ assessment of surface pH of corroding sewer pipes Asbjørn Haaning Nielsen, Aalborg University	
19.00	Dinner at Centralværkstedet		

12 OCTOBER 2017

	Wastowater treatment process	
	Wastewater treatment process Lokale A – Comwell	
9.00- 9.20	Improving the capacity of Käppala WWTP by using cyclones Sari Vienola, Käppalaförbundet	
9.20- 9.40	Long-time experiment with biological active filter (BAF) Christian Baresel, IVL Swedish Environmental Research Institute	
9.40- 10.00	Continuous Biofilm Nutrient Removal Process – One Year Of Full Scale Operation Torgeir Saltnes, Hias IKS	
10.00- 10.20	Applying a Disruptive Technology: Practical Considerations Per Henrik Nielsen, VandCenter Syd	
10.20- 11.00	Coffee break and networking	
	Energy efficient/GHG emission Lokale A – Comwell	
11.00- 11.20	Käppala WWTP future – Carbon neutral and Energy positive Catharina Grundestam, Käppala Association	
11.20- 11.40	Towards GHG-emission compensating WWTPs Jannice Örnmark, Syvab, Himmerfjärdsverket	
11.40- 12.00	Modelling nitrous oxide emissions at a full-scale WWTP Kati Blomberg, Aalto University	
12.00- 12.20	Climate neutral sidestream control strategies and models Mikkel Holmen Andersen, DHI	
11.20- 12.45	Closing of the conference – and welcome to next NORDIWA conference Lokale A – Comwell	
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	

Anammox Lokale A – Comwell	P-recover workshop (WS) Lokale B – Comwell	Management and legislation to improve climate change adaption (Workshop) Lokale C - Comwell	Hydraulic modelling (WS) Lokale D – Comwell
Four years of piloting- mainstream nitritation- anammox David Gustavsson, Sweden Water Research	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 Løkkegaard and Morten Lykkegaard Christensen, Danish Technolgical Institute and Aalborg University Slamförbränning med fosfor ätervinning Rafea Naif Majeed Al-Sabti, Sandviken Energi Vatten AB Which phosphorus recovery solution would you choose? Bengt Hansen, Kemira Kemi AB	Sustainability assessment of stormwater management systems Sarah Brudler, DTU Environment/ VCS Denmark FROM WATERWAYS TO SEWAGE TREATMENT FACILITIES Anne Christine Matzon, Horten Law Firm EXPERIENCE WITHIN CLIMATE ADAPTATION Line Markert, Horten Law Firm	Analysis/Plan of Separat- & Centralising of Drainage systems Sabah Al-Shididi, Hillerød Forsynin 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
Anammox Activity in the Main- and Sidestream at Marselisborg Mikkel Holmen Andersen, DHI			
Full scale operation of DeAmmon® N-removal from reject water Morten Rostad Haugen, Bekkelaget Vann AS			
Piloting the ANITAMox – process for reject water treatment Johanna Castrén, Helsinki Region Environmental Services Authority HSY			

Managing our wastewater system	Managing & analyzing climate solutions
Lokale B – Comwell	Lokale C – Comwell
Practical approach to set-up an asset management system	Holistic stormwater and climate adaptation management
Christian Schmidt Berthelsen, BIOFOS	Charlotte Sinkbæk Schow, Ramboll
Asset Management for 1,500 km Sewer System	Assessing profitability of cloudburst management investments
Benny Nielsen, Herning Water A/S	Helena Åström, Orbicon A/S
Asset Management in VCS Denmark	Cloudburst management plan - experience from Herlev
Arne Svendsen, VCS Denmark	Jørn Bjarke Torp Pedersen, Orbicon A/S
Managing our wastewater system – the Sustainability Index	CBA for deciding local flood protection levels
Magnus Montelius, Svenskt Vatten	Jan Jeppesen, EnviDan A/S

Partnering and cooperation	Designing innovative water sensitive urban solutions (WSUD)/LAR)
Lokale B – Comwell	Lokale C - Comwell
Partnering – a new way of working and innovating	Safe recreational lake waters
Karina Topp, Aarhus Water Ltd.	Lotte Bjerrum Friis-Holm, Danish Technological Institute
Wastewater treatment 2040 – How to get there?	Detention basins in Virum
Tor Gunnar Jantsch, Frevar KF	Nina Caspersen, Lyngby Taarbæk Forsyning A/S
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
	Climate adjustment and CO2 savings goes hand-in-hand Stella Jensen, Kolding Kommune/BlueKolding

Practical information including price

- Conference Fee Early Bird Discount until 31 August 5.495,- DKK
- Standard Conference fee 5.995 DKK Conference fee for presenters 3.995.- DKK
- 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

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AALBORG KLOAK a a r h u s v a n d







For more information www.nordiwa.org