

Webinar

Preliminary programme - Status 28. September 2020

Advanced wastewater treatment for API reduction: Results of CWPharma project and proceedings in Sweden

Date: 29. October 2020, 09:00 -16:30

Registration: [Link](#) (no fee)

Platform: GoToWebinar

Target group: utilities, authorities, researchers, engineering and consulting companies

Organized by: Berlin Centre of Competence for Water (DE), Tekniska Verken i Linköping AB (SE)

The overall aim of the **CWPharma project** is to reduce the load of active pharmaceutical ingredients (APIs) going into the aquatic environment and especially the Baltic Sea. Municipal wastewater treatment plants (WWTPs) are relevant point sources of APIs, as they treat the wastewater from public households, hospitals and industry of the connected catchment area.

However, conventional "state-of-the-art" WWTPs can only remove some APIs whereas other APIs can pass the WWTP with minor to no reduction. Therefore, reduction of a broad range of APIs can only be achieved by using targeted advanced treatment techniques such as ozonation or powdered and granular activated carbon, respectively.

Within this webinar, results and recommendations from the CWPharma project on advanced wastewater treatment will be presented along with the current proceedings of this topic in Sweden, including presenters from Lund University (LTH), Swedish Environmental Research Institute (IVL), the Swedish Water & Waste Water Association, Swedish EPA and Lidköping municipality (VA). There will also be a presentation of a digital twin of the ozone reactor in Linköping.

09:00 – 10:35	Session: Introduction, results of CWPharma project
09:00 – 09:05	Webinar meeting structure (R. Sehlén, Tekniska Verken i Linköping AB)
09:05 – 09:15	Welcoming (C. Sund, CEO of Tekniska Verken i Linköping AB)
09:15 – 09:35	Overview of CWPharma project (U. Miehe, Berlin Centre of Competence For Water – KWB)
09:35 – 09:55	Evaluation and experiences of full-scale ozonation (R. Sehlén, Tekniska Verken i Linköping AB)
09:55 – 10:15	Ozonation of wastewater with high bromide content (S.B. Larsen, Kalundborg Utility)
10:15 – 10:30	Break

10:30 – 11:50	Session: Results of CWPharma project – continued
10:30 – 10:50	Adaptation strategies for moving bed biofilm reactors to removing pharmaceuticals (K. Bester, Aarhus University)
10:50 – 11:10	Removal of pharmaceutical metabolites by ozonation followed by different post-treatments (S. Kharel, Aarhus University)
11:10 – 11:30	Ecotoxicity results and biotest recommendations for evaluation of advanced waste water treatment (M. Lukas, German Environment Agency)
11:30 – 11:50	Recommendations for advanced wastewater treatment (M. Stapf, Berlin Centre of Competence for Water – KWB)
11:50 – 12:50	Lunch break
12:50 – 14:30	Session: Proceedings on API elimination in Sweden
12:50 – 13:10	Funding for full scale API removal projects in Sweden (M. Lüdtke, Swedish EPA)
13:10 – 13:30	Swedish procurment group for API removal facilities (J. Olsson, Swedish Water & Waste Water Association/ Käppala WWTP)
13:30 – 13:50	A variety of activities/projects to complete our understanding (C. Baresel, IVL Swedish Environmental Research Institute)
13:50 – 14:10	A prediction tool for ozonation, bromate removal – and other ongoing activities at the Department of Chemical Engineering in Lund (M. Cimbritz, LTH, Faculty of Engineering)
14:10 – 14:30	(Real-time) prediction of bromate formation and micropollutant removal with digital twins for ozonation (W. Audenaert, AM-TEAM)
14:30 – 14:45	Break
14:45 – 16:30	Session: UWWTD and permitting in practice with panel debate
14:45 – 15:15	Urban Wastewater Treatment Directive, EQS and the Weser verdict (P. Sörngård, Swedish Water & Waste Water Association)
15:15 – 15:25	Updates from LIWE/LIFE project: New permit and current status (P. Bratt, Lidköping Municipality)
15:25 – 16:25 Including 15 min for questions	Panel debate: Lidköpings new permit. How does it correlate with the Urban Wastewater Treatment Directive, EQS and the Weser verdict. Attendees: <ul style="list-style-type: none"> - P. Sörngård, Swedish Water & Waste Water Association - M. Cimbritz, LTH, Faculty of Engineering - P. Bratt, Lidköping Municipality - M. Lüdtke, Swedish EPA Moderator: <ul style="list-style-type: none"> - R. Sehlén, Tekniska Verken i Linköping AB
16:25 – 16:30	Closing (R. Sehlén, Tekniska Verken i Linköping AB)