

European workshop: Waste water phosphorus removal tomorrow: ambitions and reality

<http://phosphorusplatform.eu/Premovalworkshop>

Date/place:

Wednesday 9th October, Liège

University (city centre, place du 20 août)

Back-to-back to the European Conference
on Sludge Management), Liège

ECSM'19 - 6-8 October 2019

<https://events.uliege.be/ecsm2019/>

*University of Liège (Salle Académique,
bâtiment A1 central, place du 20 août*

*In Liège historic city centre, <30 mins walk or <10 mins
direct bus from the rail station (Guillermains), which is 45
mins – one hour direct train from Brussels (Gare de Midi
or Centrale) or from Brussels Airport.*

https://www.campus.uliege.be/cms/c_1756284/fr/campus-de-liege-centre-ville-zone-du-20-aout



Objectives and content:

In the context of the current revision of EU water policy (Water Framework Directive, Waste Water Treatment Directive), enable dialogue between the water industry, experts and policy makers (EU, national) on perspectives for phosphorus removal:

- low discharge consents
- flexible permitting / emissions trading
- P-removal from small sewage works

Target participants:

- Water companies and utilities, water boards, water treatment engineering companies
- Regulators and policy makers: national, regional, European
- Experts, consultants, researchers, stakeholders
- Technology suppliers: P-removal systems, P monitoring equipment ...

Technology suppliers and RTD projects will be able to present their processes, innovation and research on stands during the day.

Registration: <https://www.eventbrite.co.uk/e/waste-water-phosphorus-removal-tomorrow-ambitions-and-reality-tickets-60192633788>

Registration prices (ex. VAT): 180€ (90€ for members of ESPP, IWA, Eureau, Ciwem, ECSM registrants).
Networking dinner Tue. 8th October: 50€.

Tue. 8th October - evening (after ECSM) – **networking dinner 19h00**

Wed 9th October – registration 08h00

08h30 - Futures and perspectives

- **Andrea Gysin, Thames Water, UK, and ESPP Board** – opening
- **Maria Albuquerque, Veolia** – perspectives for phosphorus removal in the sewage works of the future – optimised energy and resource recovery – from the starting point of today's infrastructure
- **Leon Korving, WETSUS** - The interaction between iron and phosphorus: often overlooked but key to sewage treatment and water quality.
- **Patricia Aubeuf-Prieur, Kemira** - It's not just about hardware – accompanying optimisation of P-removal and wwtp operation with monitoring, software and expertise
- **Trudy Higgins, 'Marine Environment and Water Industry', European Commission DG Environment** - EU water policy update – preliminary outcomes of Urban Waste Water Framework Directive Evaluation and Water Policy Fitness Check
- Questions and discussion

10h20 – 10h40 – break

10h40 - Low phosphorus discharge consents

- **Pete Vale, Severn Trent Water, UK** - presentation of UK CIP2 trials – 20 different P-removal technologies tested full scale in sewage works – technology providers' claims of 0.1 mgP/l versus reality – which technologies performed best – overall conclusions taken from these trials by the UK regulator
- **Laura Rossi, Helsinki Region Environmental Services Authority (HSY)**: the road from 4 mgP/l to 0.1 mgP/l, optimising chemical precipitation, reliability and permitting
- **Daniel Klein, EGLV (Emschergenossenschaft & Lippeverband)** water boards, Germany: achieving low P discharge in existing/upgrading sewage works
- **Pia Ryrfors, VEAS Norway**: ultra-compact wastewater treatment plant with high phosphorus recovery yield
- **Thomas Bugge, Suez (Denmark)** – Upgrading sewage works at Skanderborg and Aarhus (Aaby and Marselisborg) for low phosphorus discharge, addressing stormwaters and synergy with phosphorus recycling.
- **Jeroen Deurinck, Aquafin, Flanders** - targeting projects to achieve cost-effective low nutrient emissions
- Questions and discussions

13h00 – 14h00 lunch

14h00 – Small sewage works, flexible permitting and emissions trading

- **Eve Germain-Crips, Thames Water UK** - Practical challenges of P-removal in small sewage works – onsite operators, equipment, monitoring & control, maintenance – costs per kg P removed
- **Josh Bunce, Newcastle University UK** – pros and cons of phosphorus removal options for small sewage works
- **Lydia O'Shea, Wessex Water UK** – experience with catchment permitting with UK regulator – reducing total costs and addressing the small works challenge
- **Jóannes Jørgen Gaard, Denmark Ministry of Environment and Food** - Danish national taxes on phosphorus discharges and on sludge ash landfill.
- Questions and discussion
- **Claire McCamphil, European Commission DG Research & Innovation** – overview of relevant output from past/existing EU-funded R&D projects and perspectives for future funding, in particular to support policy objectives
- Panel discussion – what does it all mean for realistic regulation, costs, R&D and technology development – conclusions / where can we go from here and what actions are needed? – **Greet De Guedre, EUREAU** – **Alessandro Spagni, ENEA and Italian Phosphorus Platform - European Commission** - **Marco Blazina, MM (Milan's water operator) and Aqua Publica**

16h00 – Closure – **Jean-Christophe Ades and Bengt Hansen, Kemira and ESPP Board**