

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

<http://phosphorusplatform.eu/Premovalworkshop>

Date/place:

**Wednesday 9<sup>th</sup> October, Liège**

University (city centre, place du 20 août)

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

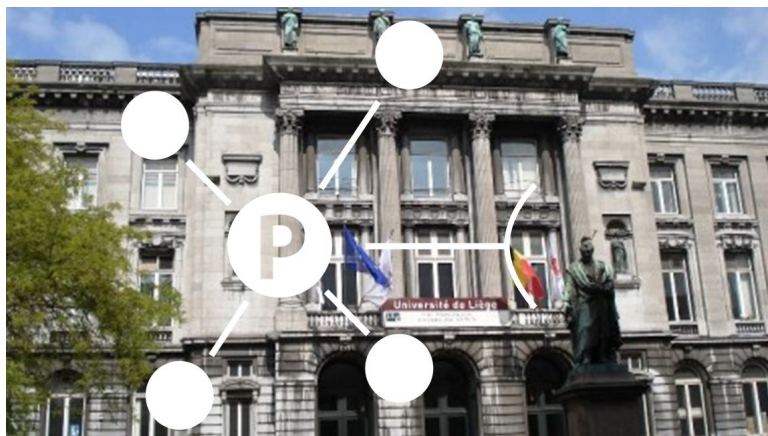
**ECSM'19 - 6-8 October 2019**

<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](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

Presentations:

Presentations will be **by water companies and sewage treatment operators (presenting results of trials on-site in real operating conditions and experience of operation in sewage works)** and by policy makers, with discussion with panels of experts.

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

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 ...

**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 ESP, IWA, Eureau, Ciwem).  
Networking dinner Tue. 8<sup>th</sup> October: 50€

**Stands** 1400€ (800€ ESPP members) ex. VAT – does not include registration

To propose a presentation, contact [info@phosphorusplatform.eu](mailto:info@phosphorusplatform.eu)

## Programme

**Tue. 8<sup>th</sup> October** - evening (after ECSM) – **networking dinner**

**Wed 9<sup>th</sup> October** – registration 08h00

08h30 – Opening **Andrea Gysin (Thames Water and ESPP Board)** – Futures and perspectives

- **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 - **TBD**
- **Leon Korving, WETSUS** - The interaction between iron and phosphorus: often overlooked but key to sewage treatment and water quality.
- **Jesper Berner, Kemira** - It's not just about hardware – accompanying optimisation of P-removal and wwtp operation with monitoring, software and expertise
- **Matjaz Malgaj, Head of Unit 'Marine Environment and Water Industry', European Commission**- EU water policy update – objectives and status – significance of phosphorus –
- Questions and discussion

10h20 – 10h40 – break

10h40 – low phosphorus discharge consents

- **UKWIR 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
- **Pete Vale, Severn Trent Water, UK** - experience of 1 - 2 of the technologies which showed best in the CIP2 trials – results in different operating conditions – challenges – pros and cons - perspectives
- **Laura Rossi, Helsinki Region Environmental Services Authority**: the road from 4 mgP/l to 0.1 mgP/l, optimising chemical precipitation, reliability and permitting
- **EGLV (Emschergenossenschaft & Lippeverband) water boards, Germany**: achieving low P discharge in existing/upgrading sewage works
- VEAS Norway: rapid operating P removal and sludge liming for low P losses to Oslo Fjord
- Presentations of experiences from other water operators or utilities across Europe towards low P discharge consents
- 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
- **Jane Youdan & Lydia O'Shea, Wessex Water UK** – experience with catchment permitting with UK regulator – reducing total costs and addressing the small works challenge
- International sewage works operator (TBC) - overview of how permitting works in different countries in Europe (daily maximum, average, different sampling regimes ...) and what are the consequences for water operators and so for the tax payer/consumer
- Questions and discussion
- **Pavel Misiga, Head of Unit 'EcolInnovation', 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? - **Oliver Loebel, EUREAU** - **Karyn Georges, Isle Utilities** - European Commission - researcher / IWA / Ciwem TBC

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