WASTEWATER TREATMENT PLANTS AS RESOURCE RECOVERY FACTORIES:
- NO LONGER A DREAM -

PROGRAMME

WEDNESDAY 16/05/2018 (Room 5 - ICM)

09:30 – 10:00 - Registration & Coffee

10:00 – 10:15 - Conference opening and welcome
Christian LODERER, Project Coordinator of H2020 Action POWERSTEP, Berlin Centre of Competence for Water (Germany)
Evdokia ACHILLEOS, Senior Project Advisor, Unit H2020 Environment and Resources, European Commission (EASME)
Joachim HEIDEMEIER, Head of Department III 2, German Environmental Agency (Germany)

10:15 – 11:40 - WWTPs as resource recovery factories: no longer a dream
Moderator: Boris LESJEAN, Innovation Director, Veolia (Germany)

Keynote: WWTPs as part of the energy transition game
David C. STUCKEY, Professor of Biochemical Engineering, Imperial College London (UK)

POWERSTEP – An example on how to become an energy-positive WWTP
Christian LODERER, Project Coordinator of POWERSTEP, Berlin Centre of Competence for Water (Germany)

11:40 – 12:25 - How relevant is the bio-energy pathway for other sectors?
Moderator: Christian LODERER, Project Coordinator of POWERSTEP, Berlin Centre of Competence for Water (Germany)

Short presentations by: Aerzener Maschinenfabrik GmbH, Evonik, German Biogas Excellence

Panel discussion
Evdokia ACHILLEOS, Senior Project Advisor, Unit H2020 Environment and Resources, European Commission (EASME)
Joachim HEIDEMEIER, Head of Department III 2, German Environmental Agency (Germany)
Boris LESJEAN, Innovation Director, Veolia (Germany)
Representatives from Evonik, German Biogas Excellence and Aerzener Maschinenfabrik GmbH
12:25 – 13:00 - Lunch

13:00 – 14:00 - Enhanced carbon extraction - a key element to energy-positive WWTPs
Moderator: Christian REMY, Senior Researcher, Berlin Centre of Competence for Water (Germany)

- Conventional versus enhanced primary treatment?
  Carles PELLICER-NACHER, Process Manager, Hydrotech (Denmark)

- Full-scale performance of a micro-screen as primary treatment for enhanced carbon extraction
  Rabea Luisa SCHUBERT, Process Engineer, Berlin Centre of Competence for Water (Germany)

- Energetic evaluation of enhanced carbon extraction at a small WWTP
  Damien CAZALET, Process Engineer, Veolia (Germany)

14:00 – 15:20 - What to do with the nitrogen after enhanced carbon extraction?
Moderator: Magnus CHRISTENSSON, Senior Research Manager, Veolia Water Technology (Sweden)

- Keynote: Options and strategies for nitrogen removal at WWTP
  Susanne LACKNER, Head of Institute, TU Darmstadt (Germany)

- Mainstream Anammox and NOB suppression strategies in MBBRs – from lab to full scale?
  Maria PICULELL, Senior Researcher, AnoxKaldnes (Sweden)

- Mainstream Anammox in a full-scale prototype trial at Sjölunda WWTP
  Dora STEFANSDOTTIR, Junior Researcher, AnoxKaldnes (Sweden)

- Alternative nitrogen strategies for small WWTPs
  Rabea Luisa SCHUBERT, Process Engineer, Berlin Centre of Competence for Water (Germany)

15:20 – 16:40 - Coffee Break

16:40 – 17:30 - Side-stream treatment for nitrogen removal or recovery
Moderator: Jörg KRAMPE, Head of Institute, TU Vienna (Austria)

- Nitritation as an energy efficient option - an Austrian case study
  Vanessa PARAVICCINI, Senior Researcher, TU Vienna (Austria)

- Design and operation of a full-scale plant for membrane ammonia stripping?
  Marc BÖHLER, Senior Researcher, EAWAG (Switzerland)

- SCENA process for low-energy nitrogen removal without external carbon source
  Matteo TARTINI, H2020 Innovation Action SMART-Plant Technical Manager, Alto Trevigiano Servizi (Italy)

17:30 – 17:45 - Final round of Q&A and closing of the first conference day
Moderator: Christian LODERER, Project Coordinator of POWERSTEP, Berlin Centre of Competence for Water (Germany)

Join us at Booth A6.339/438
Sponsored by Veolia Germany
09:30 – 10:00 - Registration & Coffee

10:00 – 10:10 - Conference opening
Christian LODERER, Project Coordinator of POWERSTEP, Berlin Centre of Competence for Water (Germany)

10:10 – 11:00 - Valorisation strategies for renewable energy at WWTPs
Moderator: Martin KLUGE, Project Manager, Fraunhofer IPM (Germany)
- Power2Gas with biomethanation: examples of full-scale implementation
  Laurent LARDON, Process Engineer, Electrochaea (Germany)
- Heat2Power - Implementation in a wastewater treatment plant
  David BACH, Deputy Project Manager, Fraunhofer IPM (Germany)
- Energy trading - An example on useful ways for WWTPs to become energy positive
  Lasse HELLESKOV RAVN, Business Developer, Neas Energy (Denmark)

11:00 – 11:30 - Coffee Break

11:30 – 13:00 - The concept of energy-positive WWTP from a holistic perspective
Moderator: Ulf MIEHE, Head of Department Water & Wastewater Technology, Berlin Centre of Competence for Water (Germany)
- What is the current energy situation in a WWTP? (H2020 project ENERwater)
  Stefano LONGO, Junior Engineer, Universidade de Santiago de Compostela (Spain)
- Is there a potential market for energy-positive WWTP in the EU?
  Boris LESJEAN, Innovation Director, Veolia (Germany)
- POWERSTEP technologies lead to energy-positive WWTPs (a market validation by carrying out energy audits)
  Damien CAZALET, Project Engineer, Veolia (Germany)
- Environmental benefits of energy-positive WWTP
  Christian REMY, Senior Researcher, Berlin Centre of Competence for Water (Germany)

13:00 – 14:00 - Lunch

14:00 – 15:30 - Legal and market boundaries for energy efficient wastewater sector
Moderator: Cédric HANANEL, Managing Director, ARCTIK – Communication for sustainability (Belgium)
- Legal and market conditions for energy positive WWTPs
  Nathan OBERMAIER, Senior Researcher, German Environmental Agency (Germany)
- How to make money or save money on your electricity consumption and production
  Lotte HOLMBERG RASMUSSEN, R&D Project Manager, Neas Energy (Denmark)
- How policy can promote energy-positive WWTPs – POWERSTEP Policy Brief
  Ulf MIEHE, Head of Department Water & Wastewater Technology, Berlin Centre of Competence for Water (Germany)
- Panel discussion
  Representatives from industries, politics, utilities and research
15:30 – 16:00 - Coffee Break

16:00 – 17:30 - Investments and projects towards a circular water economy
Moderator: Evdokia ACHILLEOS, Senior Project Advisor, Unit H2020 Environment and Resources, European Commission (EASME)

- The role of communication to make Circular Economy attractive?
  Cédric HANANEL, Managing Director, ARCTIK – Communication for sustainability (Belgium)

- Energy management at WWTPs - H2020 project ENERWATER
  Erik AKKERSDIJK, Process Engineer, Aggverband (Germany)

- Circular Economy from the material pathway - H2020 Project SMART-Plant
  Francesco FATONE, Professor, Università Politecnica delle Marche (Italy)

- Eco-technologies for Circular Economy - H2020 project INCOVER
  Juan Antonio ÁLVAREZ RODRIGUEZ, Technological Manager, Aimen (Spain)

- Circular Economy on the water pathway - H2020 project AquaNES
  Thomas WINTGENS, Project Coordinator, FHNW University of Applied Sciences and Arts (Switzerland)

17:30 – 17:45 - Final round of Q&A and conference closing
Moderator: Christian LODERER, Project Coordinator of POWERSTEP, Berlin Centre of Competence for Water (Germany)

Join us at Booth A3.351/450
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