

## POWERSTEP Summer School – Provisional Programme

Thursday, 06<sup>th</sup> of July 2017

**08:30 – 09:00** Registration and Opening

**09:00 – 10:00** Energy consumption and production on wastewater treatment plants

*Jörg Krampe, TU Wien*

**10:00 – 11:00** The wastewater treatment plant of the future - A partner of the energy industry?

*Christian Schaum, Universität der Bundeswehr München*

**11:00 – 12:00** Introduction to POWERSTEP EU Project <http://www.powerstep.eu/>

*Boris Lesjean, Veolia Germany*

**12:00 – 13:00** Lunch Break

### Technology Presentations POWERSTEP Part I:

**13:00 – 13:45** Control of carbon extraction from primary municipal wastewater with microscreens

*Carles Pellicer-Nacher, Hydrotech*

**13:45 – 14:30** Nitrogen removal with a compact duck-weed reactor

*Rabea Luisa Schubert, Kompetenz Zentrum Berlin*

**14:30 – 15:15** Main stream nitrogen removal through a two-stage moving bed biofilm reactor (MBBR) with nitritation and anammox

*Dóra Stefánsdóttir, AnoxKaldnes*

**15:15 – 15:45** Coffee Break

**15:45 – 16:30** Introduction to thermoelectrics and their use in WWTP

*Jan König, Fraunhofer IPM*

**16:30 – 17:15** Upscaling of Power to Gas and carbon capture technology by biological methanation

*Laurent Lardon, Electrochaea*



18:00 – 20:00 Guided City Tour Vienna (Endpoint: City Centre of Vienna)

Friday, 07<sup>th</sup> of July 2017

**Technology Presentations POWERSTEP Part II:**

**09:00 – 09:45** Side stream treatment of sludge dewatering effluent through nitrification and recycling into main stream in a two-stage wastewater treatment plant

*Vanessa Parravicini, TU Wien*

**09:45 – 10:30** Recovery of nitrogen from wastewater by membrane stripping at WWTPs and production of a marketable nitrogen fertilizer product

*Hansruedi Siegrist, EAWAG*

**10:30 – 11:15** Assessment of full plant concepts using the life cycle perspective

*Christian Remy, KompetenzZentrum Wasser Berlin*

**11:15 – 11:45** Closing Remarks

*Christian Loderer, KompetenzZentrum Wasser Berlin*

*Jörg Krampe, TU Wien*

Third Man Tour into the Viennese sewer system:

**13:00 – 14:00** Group 1

**14:00 – 15:00** Group 2

Groups will be assigned at the registration desk on the 6<sup>th</sup> of July

