



Thursday June 16th Amersfoort LIFE Event on SEWAGE MINING

"Water Boards forefront when it comes to the circular economy and they are an example to the rest of the world." There are many initiatives in which water managers operate on the WWTP of the future. Such an example is not only the new phosphate factory in Amersfoort where Water Board Vallei en Veluwe recovers phosphate and brings it back in the chain. There are the LIFE projects in the Water Board Schieland and Krimpenerwaard and the Water Board Zuiderzeeland where sludge is converted into biogas in an innovative way. Or take Cellu2PLA where cellulose from screenings over the glucose is converted into biopolymers. In Dokhaven does Hollandse Delta research for cheap nitrogen removal at low temperatures. Also abroad (Spain) is working hard on recovering phosphate by struvite.

These inspiring stories we'd like to share with you during the LIFE event on June 16 at the WWTP of Amersfoort. Afterwards you can exchange ideas with colleagues from mind during the networking reception and BBQ

Program **Venue:** Neonweg 30, 3812 RH Amersfoort

12.30 hour Registration and welcome coffee

13.00 hour Welcome by moderator
Merle de Kreuk, TU-Delft

13.10 hour Omzet Amersfoort
Henry van Veldhuizen, Waterboard Vallei en Veluwe

The treatment of wastewater requires energy. However, the Dutch water boards have targeted a new technological approach that should make WWTPs net energy producers rather than consumers. They have demonstrated that methane production by digestion of sludge can alter the energy profile of the process.

13.35 hour Cellu2PLA
Bob de Boer, Hoogheemraadschap Hollands Noorderkwartier

The intended breakthrough in this project is to produce PLA from the cellulose fraction in raw municipal wastewater, called screenings. Screenings is the fraction captured, using rotating belt fine screens, behind the coarse screening. The toilet paper, in particular the cellulose fibers present in it, is a very suitable raw material for the production of bioplastics.

14.00 hour All about LIFE
Erik Jan Langkamp, Evers + Manders en Mayke Derksen RVO.nl



14.20 hour Coffee break

14.35 hour PHORWater
Sofia Grau & Nuría Martí, Depuración de Aguas del Mediterráneo

PHORWater developed a demonstration plant to recover phosphorus from wastewater. A process of precipitation to extract phosphorous in a crystallised form - magnesium ammonium phosphate, known as struvite is used.

15.00 hour Cost-Effective Nitrogen REmoval from waste water by Low-Temperature Anammox (CENIRELTA)
Charlotte van Erp Taalman Kip, Waterboard Hollandse Delta and Tim Hendrickx, Paques

The ANAMMOX® process (anaerobic ammonium oxidation) is an innovative biological process and constitutes a significant breakthrough in the removal of nitrogen. It is a cost-effective, robust and sustainable way of removing ammonium from waste water and waste gas.

15.25 hour Innovative Sludge Reduction (Themista® and Ephyra®)
Dennis Heijkoop, Royal Haskoning DHV, Leo van Efferen, Waterboard Zuiderzeeland

Themista® is straightforward and sustainable technology for pretreatment of sludge. During a thermal/chemical process sludge is cracked, to increase the biogas yield of the sludge digestion process.

Ephyra® is a compact and sustainable technology for sludge digestion. The concept is based upon a plug flow digestion in which the hydraulic retention time (HRT) and solids retention time (SRT) are separated.

15.55 hour Wrap up

16.10 hour BBQ and Networking event

Please look at http://www.stowa.nl/nieuws_agenda/agenda/ for more activities during the opening of Omzet Amersfoort