Sewer Sediments Workshop:
Sampling, Characterization and Modelling

Date: August, 27th 2019
Time: 13:30 – 17:00

Description:

Sediments are a major concern to understand, predict and optimize sewer systems. While hydraulics in sewers are considered fairly well understood, modelled and therefore also predicted, sediments are often considered simplistically.

It is still challenging to obtain representative and reproducible samples, as the sampling methodology has often to be adapted to the rough sampling reality in the sewer system. While laboratory total suspended solids (TSS) measurements have been standardized for a long time, other sediment characterization methods still need to be discussed and improved for a more general utilization. As characterization methods are often driven by modelling intention, modelling will therefore be integrated in this discussion.

This workshop will focus on the behaviour of TSS in sewers. Only physical processes will be addressed (transport, settling, resuspension, consolidation, flocculation, …), thus excluding bio-chemical processes (e.g. biofilms, in-sediment reactions, …). Out of scope as well are catchment run-off aspects, and special structures such as retention tanks, overflow treatment equipment, …

Following short discussion starter presentations, each session will give ample time to the participants to reflect on:
-    What can be considered as state-of-the-art methodology?
-    What challenges still remain either at the research level or for application in practice?

Timeline

Time	Topics	Presenters/ Moderators
13:30 – 13:45	**Workshop opening**	
13:30 – 13:45	Workshop objectives and expectations	Sovanna Tik
13:45 – 15:15	**Session : Characterisation**	
13:45 – 13:55	Discussion starter : "Sewer sediments particles and deposit characteristics"	Alma Schellart
13:55 – 14:05	Discussion starter: "Feasibility of surrogate sewer sediments"	Roni Penn
14:05 – 14:50	Group discussion	*all*
14:50 – 15:10	Characterisation session wrap-up	Julia Ledergerber
15:10 – 15:25	***Break***	

15:25 – 16:00	**Session: Sampling**	
15:25 – 15:35	Discussion starter: "Sampling concept, experience and results in the metrological determination of annual pollution loads in sewers""	Günter Gruber
15:35 – 16:00	Group discussion	*all*
16:00 – 16:10	Sampling session wrap-up	Jean-Luc Bertrand-Krajewski
16:00 – 17:15	**Session: Modelling**	
16:00 – 16:10	Discussion starter: "Available software: state-of-the art, challenges and limitations"	Dirk Muschalla
16:10 – 16:20	Discussion starter: "Modelling sewer sediment behaviour: is it transport, deposition, erosion or all three?"	Alma Schellart
16:20 – 17:10	Group discussion	*all*
17:10 – 17:25	Modelling session wrap-up	Peter Vanrolleghem
17:25 – 17:30	**Take-home messages and perspectives**	Sovanna Tik