

Advances in Wastewater Treatment Technologies and Approaches

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Abstract:

Wastewater treatment facilities are being required to produce effluents and residual streams (biosolids) that are of increasingly higher quality. This is in terms of the concentrations of contaminants (i.e. nitrogen, phosphorous, pathogens) as well as the types of contaminants (ie. pharmaceuticals and personal care products) that should be removed. In addition the treatment processes are expected to be cost effective and have reduced green house gas emissions. This session will address research and innovations that will help designers and operators of wastewater treatment facilities to meet these objectives.

This session may address, but is not limited to the following subjects:

- What is the fate of emerging contaminants in wastewater collection and treatment systems?
- What are the innovations in treatment technologies that can cost-effectively produce high quality effluents and biosolids?
- How can the design and of operation of facilities be improved to mitigate greenhouse gas impacts?
- What are the advances in reclamation technologies for wastewater reuse?