

## **Advances in the Environmental Fate of Down-the-Drain Chemicals, including Pharmaceuticals**

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There is an increased interest in understanding the environmental risk of Down-the-Drain (DtD) chemicals, such as pharmaceuticals and personal care products. Inherent in the environmental risk assessment (ERA) process is the conduct of environmental fate studies, such that a detailed understanding of the compartments of interest, rate kinetics and predicted environmental concentrations can be utilized within the ERA. With such interest in the DtD chemicals, it is not surprising that there has been a considerable amount of scientific advances to better predict the environmental fate of these types of chemicals. This proposed session will highlight the global advances in wastewater/watershed modeling and laboratory environmental fate studies, including the use of appropriate protocols and test conditions to more accurately reflect environmental conditions, leading to a more predictive paradigm for assessing the environmental fate of DtD chemicals. The speakers will not only illustrate the advances in the field, but will draw upon the historical environmental fate methodologies conducted for these DtD chemicals and elucidate why some of the current tests (e.g. ready biodegradation test) may not be useful. Session attendees will come away from this session with a detailed knowledge of the limitations of the current methodologies, as well as the new methodologies to overcome these limitations.