



**The DFG Research Training Group on Urban Water Interfaces (UWI) invites to a  
guest lecture by**

**Prof. Dr.-Ing. Jörg E. Drewes  
Chair of Urban Water Systems Engineering  
Technical University of Munich**

**Friday, 5<sup>th</sup> October 2018, 10 - 11 am, TU Berlin, Chair of Water Quality  
Engineering, Room KF 406**

***Lecture title: Revisiting the Design and Operation of Biofiltration in Water Treatment***

*Abstract*

The use of biologically-active porous media systems, like subsurface passage such as riverbank filtration or above-ground processes like biofiltration, have been the backbone of drinking water treatment for more than a century in Europe and the United States. Depending on the specific operating conditions, these systems are capable of providing a robust barrier against turbidity, pathogens, dissolved organic carbon, nitrogen, but also emerging trace organic chemicals. However, managed aquifer recharge (MAR) systems suffer from several drawbacks including performance variability, large physical footprints, heterogeneity of the subsurface, and are characterized as passive treatment systems, which usually result in a rather conservative design practice. The research presented in this talk was motivated to develop a more active treatment system regarding the biological function of the microbiome within these systems and to overcome some of the drawbacks mentioned above.

*About the speaker*

Jörg Drewes is Chair Professor of Urban Water Systems Engineering at the Technical University of Munich (TUM), Germany. Before joining TUM in 2013, he served as Full Professor of Civil and Environmental Engineering at the Colorado School of Mines, USA (2001-2013) and Director of Research for the National Science Foundation Engineering Research Center on Reinventing the Nation's Urban Water Infrastructure (ReNUWIt).

For further information, please visit <https://www.sww.bgu.tum.de/en/home/>

How to find the Chair of Water Quality Engineering at TU Berlin:

[https://www.wrh.tu-berlin.de/menue/about\\_us/location/parameter/en/](https://www.wrh.tu-berlin.de/menue/about_us/location/parameter/en/)