



Keynote Lecture

Opportunities for Greywater Reuse at Different Scales



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Eberhard Morgenroth holds a M. Sc. (University of California 1994), Dipl.-Ing. (Technical University of Hamburg 1995), and PhD (Technical University of Munich 1998), all in civil and environmental engineering. Since 2009, he is a Professor for Process Engineering in Urban Water Management with appointments at ETH Zürich and at Eawag (<http://www.sww.ifu.ethz.ch/> and <https://www.eawag.ch/en/>). At Eawag, he is head of the Process Engineering Department. His research interests include wastewater treatment, membrane bioreactors for water reuse, control of biofilms, biofilm reactors, biological drinking water treatment, decentralized wastewater treatment, and energy recovery from wastewater and organic residuals. He is the Editor-in-Chief of *Water Research*.

Water and wastewater treatment are key to protect humans in cities by providing safe water and urban hygiene and to protect the aquatic environment from pollutants. Over the past century, urban water management allowed for healthy and pleasant living conditions in ever-growing cities in many parts of the world. This presentation will discuss the potential for local reuse of treated greywater and drivers for implementation. What are the scientific and technological challenges? How can appropriate local water reuse be implemented in a way that it does not jeopardize today's achievements in urban water management and urban hygiene? Basic sciences for gravity driven membrane (GDM) filtration and technology development for reuse of hand washing water in informal settlements (<http://www.autarky.ch/>) or resource recovery at the building scale (<http://www.eawag.ch/waterhub>) will be discussed.