

Matthias Zessner

Title:	Univ.Prof.Dipl.Ing.Dr.
Date of Birth:	20.3.1962
University:	TU Wien
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Main areas of research

- ❖ Water quality and river basin management
- ❖ Assessment of the relationship between anthropogenic activities and instream water quality
- ❖ Monitoring, modelling and management of trace substances in river basins
- ❖ Nutrient Management on regional and catchment scale
- ❖ Phosphorus recycling

Academic development

2005	Professorial qualification in the field of water quality management „Aspects of nutrient management on river basin scale“ at Vienna University of Technology
1998	PhD with doctoral thesis „Relevance of control of nutrient and heavy metal fluxes in waste water“ at Vienna University of Technology
1996-1998	Doctoral program at the Institute for Water Quality, Vienna University of Technology
1991	University degree: Environmental Engineer with Master thesis „Sewage sludge dewatering at Firma Lenzing AG“
1988-1991	Post graduate study (environmental engineering) at the Vienna University of Technology and the University for Life Sciences Vienna
1987	Masters exam (Dipl. Ing.) with Master thesis „The use of ultrasonic in water treatment“
1980-1987	Basic studies: civil engineering and water management, University for Life Science, Vienna

Professional development

2020-current	University Professor Institute for Water Quality and Resource Management, TU Vienna
2005-2020	Associate Professor at the Institute for Water Quality and Resources Management, TU Wien
2009-2018	Member of the faculty of the Vienna doctoral program on Water Resource Systems, TU Wien
1995-2005	University-Assistant at the Institute for Water Quality, Resources and Waste Management, TU Wien
1991-1995	Project-Assistant at the Institute for Water Quality, Resources and Waste Management, TU Wien

Main research interests

The main research interest of Matthias Zessner is the assessment of the relationship between anthropogenic activities, emissions to the water cycle and instream effects on water quality. The recent research of Matthias Zessner has focused on the monitoring and modelling for assessment of pollutant sources, pathways and fate across a variety of scales. This includes assessment of soil water interaction in small catchments as well as emissions modelling and development of management concepts at the large river basin scale. Zessner's research involves a high level of interdisciplinary engagement to highly explore manifold interrelations with related research fields such as hydrology, resources management, agro-economy, sanitary engineering and microbiology. Further expertise includes development of solutions for pollution conflicts in a transboundary river system as well as technical, ecological and economical assessment of technologies for phosphorus recycling.