



WWW.WATER.TUM.DE

## TUM Water Cluster - Annual Report 2016

The TUM Water Cluster is the cross-disciplinary focus program of Water Research at the TUM. It's central objectives are to coordinate research and teaching related to water, to establish harmonized information exchange regarding water related issues and to carry out outreach activities to increase awareness of water related topics.

### Research Projects

In 2016 several joint research proposals were prepared and submitted, e.g. to the grant program „Forschung für Nachhaltige Entwicklung“ (FONA) of the BMBF or to the „Bayerischen Forschungstiftung“.

### Lecture Series

The lecture series was continued successfully with contributions from internationally renowned lecturers:

- „**At the Confluence: nutrients, trace chemicals, and sustainability in the urban water sector**“; AEESP Distinguished Lecturer Prof. Nancy Love (University of Michigan)
- „**Floods in a Changing World**“; Prof. Günter Blöschl (TU Wien), recipient of the Horton Medal
- „**Advanced Wastewater Treatment Systems and Upgrade to High Quality Process Water for Reuse Purposes**“; Dipl.-Ing. Heribert Möslang, Veolia
- „**From Science To Policy in the Water World – Work at the German Environment Agency**“; Dr. Lilian Busse, German Environment Agency
- „**Seeing Things Differently: Rethinking the Relationship Between Data, Models, and Decision-Making**“; Darcy Lecturer Prof. Ty Ferre (University of Arizona).

On July 6<sup>th</sup>, 2016, an interactive workshop was organized to discuss and develop research strategies related to water among TUM researchers.

### Exhibition on Water Research during the opening of the TUM Science & Study Center Raitenhaslach

The new Academy Center of the TUM was opened in the historic monastery Raitenhaslach on 4 June 2016 by a ceremony with Prime Minister Horst Seehofer. The TUM Water Cluster supported the opening event with a poster exhibition on the subject of water. The academy center and the poster exhibition were open to the public on 5 June. The exhibition and guided tours of the Academy Center attracted a great interest among the more than 4,000 visitors.

### Contribution to the Munich Science Days

The TUM Water Cluster presented a „Market Stand of Sciences“ at the Munich Science Days, which in 2016 were under the slogan “Water – Resource of Life”. Visitors could learn about latest research about natural drinking water treatment, water catchment from fog, energy efficient treatment of wastewater, invasive species and water and species protection. Further topics were the contamination of water, flood protection and the generation of energy from water. Moreover, several members of the TUM Water Cluster gave lectures which aimed to convey water topics to a wide audience.



### Co-Organization of the Workshop ‚SWEMSA 16‘

The Chair of Urban Waters Systems Engineering organized in November 2016 as member of the TUM Water Cluster in collaboration with the BMBF-funded FOR-IDENT consortium as well as the European NORMAN initiative and with participants from three COST initiatives the workshop ‚Non-Target Screening embedded in (Open Access) Platforms and its role in various disciplines‘. The more than 100 participants discussed 20 scientific talks and four panel discussions on the current strategies and future perspectives of non-target screening of emerging contaminants.

### FIThydro – EU Horizon 2020 Project



From November 21<sup>st</sup> until November 23<sup>rd</sup>, 2016, the TUM chair of Hydraulic and Water Resources engineering (TUM-HE, Prof. Rutschmann) has conducted the Kickoff event for the Horizon 2020 Project “FIThydro”, a project in the renewable energies call of the EU: Around 50 scientists from 26 partner Organizations -including an international scientific advisory board- have met at the TUM Science and Study Center Raitenhaslach. The topic of FIThydro is hydropower, its impacts on ecology in general and fish in specific, investigating possible and most cost efficient mitigation measures and the development of a decision support system for politicians and other decision makers. The consortium seeks to address these issues by monitoring and developing 13 test cases (existing hydropower plants) in Scandinavia, the Alpine area, Switzerland, France/Belgium and the Iberian peninsula. In addition to the project coordination and management by TUM-HE, the following units of the TUM Water Cluster are involved in this call: The chair of Aquatic Systems Biology (Prof. Geist), the chair of Agricultural Production and Resource Economics (Prof. Sauer) and the Munich Center for Technology in Society (MCTS).