

Topics in Water Chemistry and Water Technology

2018

Annual Report of the Chair of Water Chemistry and Water Technology
and the DVGW Research Center at the Engler-Bunte-Institut

ENGLER-BUNTE-INSTITUT



Dear colleagues and friends,

With respect to water research and water management, 2018 was an exciting year. Especially the latter was exciting as we had nearly no rain but very high temperatures in Germany for more than six months. Water consumption went up due to heavy use of water for gardening. As a consequence, the water levels in reservoirs and rivers in most parts of Germany are still extremely low and people working in water works, agriculture and forestry are hoping for a wet winter time. Interestingly, a project of the University of Freiburg within the frame of the Water Research Network Baden-Württemberg (page 2) dealing with 'Drought impacts, processes and resilience: making the invisible visible – DRleR' has been running since 2016. When the project started 4 years ago, it was discussed whether droughts are really an issue in Germany with an average rainfall of around 800 mm a⁻¹. Obviously yes!

Another less exciting but highly important topic for people in research is the ongoing negotiation between German and Swedish universities and Elsevier about the access to Elsevier journals. Since July this year, we have not had any chance to download manuscripts from Elsevier journals for 2018. This conflict did not appear out of nowhere. People who have been working in research for more than a decade did see a dramatic change in how research results are traded worldwide. It seems it is a business like selling any other high quality product with one goal: pleasing the shareholders of the publishing companies. One maybe minor consequence of the change can be seen at the end of this report: At the end of this year, we do have 'printed' versions of our manuscripts from the future, i.e., 2019.

If I had to highlight a specific topic at the Engler-Bunte-Institut in 2018, it would be the inauguration of the new Engler-Bunte-Institut lecture building (page 20). After four years, we can again give our lectures directly at the Engler-Bunte-Institut. Moreover, we can run the practical courses in chemistry for students in the first semester of Chemical and Bio Engineering in March and April 2019 in new laboratories. This is really a step forward for the reconstruction of the Engler-Bunte-Institut, which will be an ongoing process for the next 8 to 10 years.

As you can see from the report (page 18), we do have three new PhD students in Water Chemistry and Water Technology. Together with Johannes Gescher from the Institute of Applied Biology, we won two new projects where we will work with bioelectrochemical systems. Moreover, we had guest scientists from Australia (Prof. Yiwen Liu), China (Prof. Guihua Xu), France (M.Sc. Rana Hatoum) and Poland (Dr. Marta Gmurek), working on biological and chemical water treatment processes as well as the degradation of micropollutants. I hope you can find one or the other interesting topic on the following pages.

I wish you all the best for 2019

Harald Horn