



# International Symposium

June 6-7, 2024

Volkshaus Jena, Germany

- Unraveling the Linkage of Surface and Subsurface Ecosystems in a Changing Environment -

With excursion to the Hainich Critical Zone Exploratory on June 8, 2024

How deep does the influence of the surface extend into the earth beneath our feet? For the past 11 years, the **Collaborative Research Centre 1076 AquaDiva** has built up unprecedented infrastructure to answer questions about how the surface and subsurface are coupled and the role of subsurface ecosystems in providing ecosystem services such as clean drinking water. Research in the CRC AquaDiva shows that understanding subsurface waters requires going beyond the traditional concept of aquifers as 'rocks permitting water flow' and groundwater quality as a consequence of geochemical reactions and surface inputs, to understanding the key role of subsurface life. The extent of connection to the surface depends on the local geology and how that combines with surface vegetation and soils to control the downward movement of water, particles, organisms, and solutes. These inputs combine with subsurface conditions to produce dramatically different microbial communities and element cycling in different domains.

The purpose of this International Symposium is to bring together a broader spectrum of researchers and disciplines to learn about the remarkable infrastructure at the Hainich Critical Zone Exploratory and the Saale-Elster-Sandsteinplatte Observatory for observing and sampling different subsurface domains and what has been investigated and learned so far; to plan for future research to answer new questions that have arisen; and to take advantage of expanding observations at a time when surface conditions (weather, vegetation) may be expected to continue to change rapidly with consequences for water resources in Thuringia and Germany.

We cordially invite contributions from researchers interested in the links between surface and shallow groundwater from a variety of disciplines, including Earth system science, environmental microbiology, ecology, hydrogeology, soil system sciences, and related fields, to visit the CRC field sites, present their own research, and discuss future research strategy to improve understanding of how a changing environment will affect these connected systems and their associated ecosystem services.

Kai Totsche, Kirsten Küsel, and Susan Trumbore on behalf of the AquaDiva Consortium

If you are interested, please send an e-mail to [aquadiva@uni-jena.de](mailto:aquadiva@uni-jena.de)



Further information  
[www.aquadiva.uni-jena.de/international-symposium-aquadiva](http://www.aquadiva.uni-jena.de/international-symposium-aquadiva)

