

# CALL FOR ABSTRACTS

RIVER BASINS conference provides a platform for the exchange of recent progresses and research in the field of river basin management. This includes the quantification of water and mass fluxes, the investigation of processes in river systems and ecological research, as well as the implementation of promising management strategies.

Originally promoted and hosted by KIT Karlsruhe, RIVER BASINS 2024 (<http://www.riverbasins.kit.edu>) will be hosted by Budapest University of Technology and Economics (BUTE) in a beautiful venue with view on the Danube.

**When: 04 – 05 June 2024**

**Where: Budapest University of Technology and Economics**



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The theme of the conference will be **Emissions in River Basins – Sources and Sinks**, with focus on *Monitoring, Modelling and Management*.

River basins are vital ecological systems that serve as essential conduits for water, nutrients, and sediment, supporting diverse ecosystems and human societies. However, with increasing anthropogenic activities and rapid urbanization, river basins have become a focal point for the accumulation and transport of various pollutants and contaminants, posing significant environmental challenges. Emissions of pollutants, both from point and non-point sources, contribute to the degradation of water quality and have far-reaching consequences on aquatic and terrestrial ecosystems. Understanding the sources and sinks of emissions within river basins and implementing effective management strategies is of paramount importance for sustainable water resource management and safeguarding ecological integrity.

Challenges in monitoring consist in the choice of relevant chemical determinants, the selection of monitoring sites and monitoring frequency that allows for reliable results under constraints of limited staff and budget, the development of sampling methods which allow analysis of multiple compound with different substance properties and the availability of sensitive enough analytical methods to yield quantitative results even if substances occur only in trace levels.

The use of monitoring data in emission, transport and fate modelling is heavily dependent on data to be made accessible before they can be combined and analysed. Available data sets often contain errors as they were not checked and used before, they might miss crucial meta data or the meta data and the data structure is not harmonized between different data sources. Adequate procedures to work with such data need to be developed. Statistical procedures for best evaluation of concentration data are still evolving and application in the field is still lagging behind the state of the art. Finally, modelling approaches for some emission pathways and sources are missing or not fit for purpose. The same especially holds for transport and fate of particle bound pollutants.

Pollution management building on monitoring and modelling additionally faces the challenges of ever new substances replacing the investigated and regulated ones. Furthermore, once effective and efficient pollution mitigation measures are identified, they often cannot be implemented in the water sector itself but require cross-sectoral cooperation for their implementation (e.g. with agriculture, transportation or industry).

For having exchange of ideas regarding these issues, the Scientific Committee of RIVER BASINS 2024 invites you to present and discuss your recent experiences, developments and research activities, by submitting abstracts (max. 500 words) for oral or poster presentations. Please submit you abstract via email to [riverbasins@iwg.kit.edu](mailto:riverbasins@iwg.kit.edu) before **31<sup>th</sup> January 2024**.

RIVER BASINS 2024 is organized in cooperation with:

