



**The DFG Research Training Group on Urban Water Interfaces (UWI) and the
Colloquium Hydrosociences invite to a guest lecture by**

**Prof. Chris Soulsby, DSc, PhD
School of Geosciences, University of Aberdeen, Scotland, UK
Thursday, 17 June 2021, 4:15 – 5:15 pm
via Zoom**

Lecture title: Using stable isotopes to understand urban ecohydrology in Berlin

Abstract

Stable isotopes of water are powerful tools for tracing multiscale hydrological processes in water resource systems. Urban areas are complex hydrosystems that integrate engineered infrastructure (e.g. urban drainage, water supply networks and waste water treatment facilities) with the natural hydrology of greenspaces (e.g. forests, parklands, gardens etc.). The interactions between these two components are often poorly understood, inhibiting optimal and sustainable management of urban water resources at a time when population growth and climate change are creating acute pressures in many cities. This talk will outline some major findings of extensive isotope studies in Berlin over the last 3 years that have formed part of the MOSAIC (Modelling Isotopes in Surface and Groundwater in Urban Catchments) project funded by the Einstein Foundation and the DFG UWI (Urban Water Interface) initiative. These studies have sought to integrate intensive monitoring of isotopes in Berlin's hydrological cycle with state of the art ecohydrological models to better understand Berlin's urban water systems. The work has integrated observations at the plot-scale, in key sub-catchments and across the entire city. Implications of these insights for future management will be discussed.

About the speaker

Chris Soulsby is Professor of Hydrology at the University of Aberdeen in Scotland. He has over 30 years experience in both isotope hydrology and ecohydrology and has conducted research in every continent apart from Antarctica. He has spent much of the last 2 years in Berlin as a Fellow of the Einstein Foundation at TU. He is also a Visiting Scientist (Senior Research Fellow) at IGB in Berlin. He has published over 300 research papers and is an elected Fellow of the American Geophysical Union and the Royal Society of Edinburgh (Scotland's National Academy).

Personal website:

<https://www.abdn.ac.uk/geosciences/people/profiles/c.soulsby>

Join Zoom meeting:

[https://tu-](https://tu-berlin.zoom.us/j/62703441873?pwd=NjFqZ3pYcS9WVUxxR1c3Q05EN1FKUT09)

[berlin.zoom.us/j/62703441873?pwd=NjFqZ3pYcS9WVUxxR1c3Q05EN1FKUT09](https://tu-berlin.zoom.us/j/62703441873?pwd=NjFqZ3pYcS9WVUxxR1c3Q05EN1FKUT09)

Meeting ID: 627 0344 1873, Passcode: 113742