

The UFZ has a strong commitment to diversity and actively supports equal opportunities for all employees regardless of their origin, religion, ideology, disability, age or sexual identity. We look forward to applications from people who are open-minded and enjoy working in diverse teams.

Your contact for any questions you may have about the job:

Dr. Steffen Kümmel: steffen.kuemmel@ufz.de

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Please submit your application with your cover letter, CV and relevant attachments per Email.

Place of work: Leipzig

The Helmholtz Centre for Environmental Research (UFZ) with its 1,100 employees has gained an excellent reputation as an international competence centre for environmental sciences. We are part of the largest scientific organisation in Germany, the Helmholtz association. Our mission: Our research seeks to find a balance between social development and the long-term protection of our natural resources.

Green roofs (roofs with a planted surface) may provide important ecosystem services in urban areas resulting in several benefits such as absorbing rainwater, providing insulation, creating a habitat for wildlife, helping to lower urban air temperatures and mitigate the heat island effect. The Department of Isotope Biogeochemistry offers a MSc thesis topic which aims to investigate the transformation potential of air- and water-borne urban contaminants such as polyaromatic hydrocarbons (PAHs, e.g. naphthalene or methylnaphthalene).

Master thesis (m/f/x) - "Transformation of urban contaminants by green roof plants using stable isotope techniques"

Full-time, according to university requirements.

Your tasks:

- Set-up of pollutant-spiked in situ plant uptake and transformation experiments on a green roof research facility available at UFZ
- Sampling of water and plants, extraction and clean-up of the pollutants from those matrices and laboratory analyses (concentration analysis, metabolite analysis, compound-specific stable isotope analysis, etc.)
- Data interpretation in the context of potential transformation processes on the green roof.

Your profile:

- You should have a background in environmental sciences, plant physiology, environmental chemistry, biogeochemistry and/or related disciplines.
- You should be highly motivated and able to work in the laboratory dealing with different analytical techniques.
- You should have good communication skills in English.

We offer:

- A close and good supervision.
- Insights into the work of a leading research institute.
- Excellent technical facilities and work in an interdisciplinary, multinational team.
- The possibility to introduce your own ideas and impulses from the beginning.