



Sedimentary phosphate remobilisation and in-stream mitigation under climate change conditions

PhD position within Horizon Europe MSCA Doctoral Network “BEYOND”

This fully funded PhD position is available under the recently launched Horizon Europe Marie Skłodowska-Curie Action (MSCA) Doctoral Networks (DN) project “**BEYOND**” Beyond the current: Improving European flowing waters in an era of global change. BEYOND will train the next generation of water professionals who will deliver scientific and technological innovation across disciplines, institutions and countries to solve European water quality problems in an era of global change.

This PhD position aims to analyse whether aquatic sediments may become an internal source for phosphorus and other contaminants under changing climatic conditions and to test readily available adsorptive materials for trapping these contaminants in the field. You will perform lab experiments to determine phosphorus and pollutant remobilization from sediments at various environmental conditions. The binding capacity of different adsorptive materials will be determined via laboratory and field experiments. You will develop temperature-dependent mobilization and adsorption models to identify conditions and materials with a high release/trapping capacity and deduce management strategies for the mitigation of water pollution in human-impacted catchments in the future. The PhD position includes short visits and secondments to BEYOND partners (e.g. Institut Agro Agrocampus Ouest Rennes, France; Sveriges Lantbruksuniversitet, Sweden) for additional training and knowledge exchange.

The project will be supervised by Gabriele Weigelhofer (WasserCluster Lunz, Austria; BOKU University Vienna) and co-supervised by Magdalena Bierzoza (Sveriges Lantbruksuniversitet, Sweden). Miriam Glendell (James Hutton Institute, UK) and Michael Rode (UFZ, Germany) will be the advisors for the PhD. More information on the BEYOND project and PhD selection process can be found at the following websites: <https://cordis.europa.eu/project/id/101169293> and <https://www.slu.se/en/departments/soil-environment/research/research-projects/beyond/>

Working place: WasserCluster Lunz – Biological Station GmbH, 3293 Lunz am See, Austria <https://wcl.ac.at/en/>; Home university: BOKU University Vienna <https://boku.ac.at/en/>

Extent of employment: 40 hours per week

Duration of employment: 3 years

Gross monthly salary: EUR 2675.- (paid 14 times per year, annual indexing 3%)

The gross monthly salary consists of a country-dependent living allowance, a mobility allowance, and, if applicable, a family allowance.

Timeline: This position is expected to start between July 1st and September 30th, 2025. Candidates selected for interviews will be contacted within one month of the closing date.

Qualifications

- The candidates must have an MSc (or an equivalent) degree in environmental sciences, soil science, biogeochemistry, stream ecology, or a related discipline. A solid background in statistical data analysis is an important asset.
- Potential for conducting outstanding research, as demonstrated by scientific accomplishments (quality of MSc thesis, code repositories, conference presentations, outreach activities, or publications).
- Interest in working in a multidisciplinary and international research environment.
- Excellent communication skills in English, both verbally and in scientific writing.
- Be willing to undertake international travel for training and research activities of BEYOND and project-specific short-visits and secondments at partner institutions.

Eligibility criteria

Candidates must also meet the following criteria:

1) be of any nationality but must not have resided or carried out main activity in Austria for more than 12 months in the last 36 months;

2) have not yet been awarded a PhD degree.

All interested candidates, irrespective of age, nationality, gender, race, disability, religion, or ethnic background, are encouraged to apply. The working language is English.

Selection process

The applications must be received **by 15th of March 2025** including the following documents (all strictly in PDF format):

- Curriculum vitae
- Master (alternatively, the expected graduation date of Master degree) and Bachelor diplomas (in a single PDF file),
- Master and Bachelor grades' transcripts (in a single PDF file),
- Motivation letter stating your specific interest, motivation and qualifications for the project in question (max 1 A4 page),
- A research statement describing how your expertise and previous experience align with the PhD project objectives (200 words),
- The names of at least two reference persons (provide names and contact details) who can provide information on your research performance.

The applicants are encouraged to apply for up to three different BEYOND PhD positions but please note that you have to apply for them separately via relevant institutional websites. Please check the details at <https://www.slu.se/en/departments/soil-environment/research/research-projects/beyond/>

Please send your application for this PhD to: gabriele.weigelhofer@wcl.ac.at

Please also fill the BEYOND application form on the following URL:

<https://forms.gle/rKrwomLcZr7Dwm9L9>