PhD Opportunity: PEAT-FLUX Multi-Scale Geophysical Monitoring of Peatland Ecohydrology
Supervised by: Dr. Chi Zhang (main advisor) and Dr. Stephan Glatzel (co-supervisor)
Location: Faculty of Earth Sciences, Geography and Astronomy, University of Vienna, Austria
Start Date: Fall 2025 (flexible)

🌿 Project Overview

We invite applications for a fully funded PhD position focused on understanding **peatland ecohydrology** through **multi-scale geophysical monitoring**. Peatlands are globally important carbon sinks and climate regulators, yet their subsurface hydrological dynamics remain poorly resolved. This interdisciplinary project investigates how peat pore structure influences water dynamics and greenhouse gas (GHG) fluxes using state-of-the-art **geophysical methods** (e.g., geoelectrical methods and nuclear magnetic resonance techniques) and **biogeochemical measurements**. This project will capture pore- to field-scale water and structure dynamics in natural peatland systems.

👩‍🏫 Supervision Team

This interdisciplinary supervision team bridges geophysics and ecohydrology, offering strong mentorship and access to both lab and field facilities. You become an active PhD student member of the Vienna International School of Earth and Space Sciences (VISESS).

🎯 What We're Looking For

We seek a motivated candidate with a background in **geophysics, hydrology, environmental science, or a related field**. Experience or strong interest in **experimental and numerical geophysical methods** and **quantitative data analysis** is especially welcome.

- **Working Language**: English
- **German Proficiency**: Not required, but knowledge of German would be beneficial for daily life in Vienna.

🎯 Your tasks and responsibilities

- You actively participate in research, teaching & administration, which means:
- You are involved in research projects and scientific studies in the field(s) of geophysics, soil physics and modeling, geoecology, and geochemistry
- You will conduct field and laboratory experiments, as well as numerical modeling related to peatland hydrology, geophysics, and greenhouse gas flux monitoring. Presenting research at international conferences and publishing findings in high-impact journals.
- We expect you to conclude a doctoral thesis agreement within 12 months.
- You work on your dissertation and its completion.
- You hold courses and examinations according to the assignment and (co-)supervise students.
- You take on administrative tasks in research and teaching.
- You become an active team member of the working group Environmental Geophysics and Geoecology.
- You become an active PhD student member of the "Vienna International School of Earth and Space Sciences".

💼 **Employment Details**

- **Position**: University Assistant (Predoctoral)
- **Working Hours**: 30 hours/week
- **Classification**: CBA §48 VwGr. B1 Grundstufe (praedoc)
- **Contract Duration**: 3 years, with potential extension up to 4 years
- **Gross Salary**: €2,786.10/month (14 times per year), increasing with credited professional experience

💼 **Requirements for the Candidates**

- Completed Master's Degree (or equivalent) in geophysics, environmental science, hydrology, geoecology, or related fields.
- Experience and knowledge in laboratory measurements, data processing, and numerical modeling tools
- Knowledge in geophysics, fluid flow modeling, peatland ecosystems, soil physics, and biogeochemical cycles.
- Strong English communication skills
- A good team spirit and willingness to collaborate

📍 **What we offer:**

Location: Vienna, Austria

Vienna is renowned for its exceptional quality of life. It was often named the world's most liveable city, excelling in stability, healthcare, culture, environment, education, and infrastructure. The city offers a rich cultural scene, extensive green spaces, and a high standard of living, making it an ideal place to live and study.

Inspiring and supportive working atmosphere

You will be part of an international team in a healthy and fair working environment with excellent research infrastructure. You will not perform your work in isolation but collaborate with a strong research team.

Work-life balance

You have flexible working hours and the option to partly work from home upon agreement.

📩 **Application Process**

Please apply via this job link https://jobs.univie.ac.at/job-invite/4047/
Interested candidates can send any inquiries to: chi.zhang@univie.ac.at

It is that easy to apply:

- With a short letter stating your interest in the position; this could include a description of the topics that you would consider most interesting for your doctoral thesis;
- With your CV including a list of publications;
- With contact details of two persons who could provide a recommendation upon request;
- Via our job portal / Apply now - button.