

Research Scientist (PostDoc) (m/f/d)

Spatio-temporal dynamics of social-ecological systems

The Ecosystem Dynamics Group at the TUM School of Life Sciences, Technical University of Munich studies how ecosystems change in time and space. We quantify these changes, identify their causes and describe their impacts on biodiversity and ecosystem services. To do this we use a combination of diverse methods, from empirical research to remote sensing and simulation modeling. Our research contributes to robust management concepts for the sustainable provisioning of diverse ecosystem services, and for maintaining the integrity and diversity of ecosystems in a changing world. An important part of our work focuses on Berchtesgaden National Park in the German Alps, which is a living lab for understanding interactions between climate, ecosystems, and people. We are looking to fill the position of a

Research Scientist with PhD (PostDoc) (m/f/d) on spatio-temporal dynamics of social-ecological systems, full-time, available from April 2025.

Your profile

- Completed PhD in the field of geography, social ecology, forestry, geoinformatics, or related fields
- Experience in working with social-ecological systems desirable
- International publication activity
- Good communication skills
- Experience in working with diverse stakeholders desirable
- Ability to work in a team
- Experience in managing and conducting research projects desirable
- German language skills desirable (relevant for teaching, communication with local stakeholders)
- Driving license category B desirable (access to field sites)

Your tasks

You will conduct research on spatio-temporal dynamics of social-ecological systems, with a focus on quantifying, mapping and modelling current and potential future interactions between climate, ecosystems, and people. Within this broad area you will develop your own research agenda, potentially including (but not limited to) the mapping and modelling of ecosystem services, the effects of human land use (e.g., tourism) on ecosystems and biodiversity, the impacts of climate change on ecosystem services, and the trade-offs and synergies between conservation and recreation.

Specifically, tasks include:

- Contribute to a research project on human-nature interactions at Berchtesgaden National Park
- Develop a research agenda on spatio-temporal dynamics of social-ecological systems
- Development and application of quantitative methods in social-ecological systems (e.g., agent-based modelling, integrating visitors surveys and ecological data, spatial analyses based on remotely sensed or crowdsourced data)
- Analysis of existing monitoring data on social-ecological systems (with particular focus on Berchtesgaden National Park) and contributions to further improving monitoring activities
- Grant acquisition, management and implementation of projects
- Contributions to evidence-based decision making at Berchtesgaden National Park and beyond
- Supervision of students (e.g., in the context of BSc, MSc and PhD theses)

- Teaching BSc and MSc students at the TUM School of Life Sciences
- Publication of peer-reviewed scientific papers in international journals
- Active participation in national and international collaborative projects and research networks
- Science communication of research findings to local, national, and international stakeholders

Our offer

- Work in a highly dynamic research group at the forefront of the field, at the interface between excellent research (TUM) and applied protected area management (Berchtesgaden National Park)
- Opportunity to develop your own research agenda in a motivated, interdisciplinary team with a large international network
- Tap into our wide network of scientists and stakeholders in ecosystem management, conservation and related fields
- Work in Berchtesgaden National Park, one of the most iconic mountain ecosystems of Germany and epitomizing social-ecological dynamics in the Alps
- Teaching at the Technical University of Munich, possibility for habilitation (venia legendi)
- Full-time position according to remuneration group TV-L E13, initially limited to a period of three years (with potential for extension)
- The employment is through the TUM School of Life Science in Freising, Germany; the main place of work is Berchtesgaden, Germany, embedded in the national park administration, but the position is also integrated into the Ecosystem Dynamics group at TUM in Freising
- Severely handicapped persons will be given preference in case of essentially equal qualification
- The TUM aims to increase the proportion of women in its staff; applications from women are therefore expressly welcomed

Contact

Please send your application with relevant documents by February 21 2024 at the latest to:

Technical University of Munich

Chair of Ecosystem Dynamics and Forest Management

attn. Violeta Aramayo

Hans-Carl-von-Carlowitz-Platz 2

85354 Freising, Germany

Email: bewerbung.edfm@ls.tum.de

For questions about the position, please contact Prof. Rupert Seidl, rupert.seidl@tum.de.

In case of an online application (preferred) we ask you to send the documents collected in a single pdf file.

In case of a written application, we ask you to send us copies only, as we are unfortunately unable to return your application documents once the procedure has been completed.

As part of your application for a position at the Technical University of Munich (TUM), you will be submitting personal data. Please refer to our data protection information in accordance with Art. 13 of the General Data Protection Regulation (DSGVO) <https://portal.mytum.de/kompass/datenschutz/Bewerbung/> regarding the collection and processing of personal data as part of your application. By submitting your application, you confirm that you have taken note of TUM's data protection information.

Find out more about us at <https://www.edfm.ls.tum.de/> and <https://www.nationalpark-berchtesgaden.bayern.de/>