



LUDWIG-  
MAXIMILIANS-  
UNIVERSITÄT  
MÜNCHEN

DEPARTMENT OF GEOGRAPHIE  
CHAIR FOR PHYSICAL GEOGRAPHY AND LAND USE SYSTEMS



## About us:

The chair for Physical Geography and Land Use Systems (Prof. Julia Pongratz) at LMU's Department of Geography investigates the interactions between natural ecosystems, land use and climate change. Our group develops and applies the latest generation of land and Earth system models and integrates them with observations. Key research questions are the fate of natural ecosystems under the pressures of land use and climate change, Earth system feedbacks via energy, water and biogeochemical cycles, and assessing the role that the terrestrial vegetation can play for greenhouse gas emissions reduction and CO<sub>2</sub> removals in support of the Paris Agreement. The team is strongly involved in large international collaborations such as the Global Carbon Project, CMIP and IPCC.

We are looking for you:

## Scientific researcher (m/f/x) modeling Earth system feedbacks

### Your tasks and responsibilities:

The scientific researcher will be part of the Horizon Europe project "RESCUE"<sup>1</sup>, which comprises a large model inter-comparison project to quantify the Earth system response to pathways achieving climate neutrality by Carbon Dioxide Removal (CDR) deployment. A special focus lies on Earth system feedbacks and aspects of reversibility and environmental risks under scenarios of temperature overshoot. In RESCUE, the scientific researcher at LMU will

- contribute to the design of CDR scenarios as a collaboration of Earth system and socioeconomic modelers,
- set up, run and analyze model simulations of the ICON/MPI Earth System Model,
- further develop methods of "detection and attribution" in order to improve recommendations on the setup of observational systems for early detection of CDR signals and side-effects,
- take a leading role in the development of scientific publications.

### Your qualifications:

The scientific researcher's position requires

- a PhD in a natural or physical science subject (physics, geography, ecology or similar),
- good programming skills (such as fortran, python),
- excellent communication skills in English (our working language), proven also by scientific publications,
- training or experience in Earth system or climate modeling is desirable, but not essential.

### Benefits:

- the chance to be part of a dynamic team working at the frontier of Earth system science. Fruitful exchange is anticipated in particular with the transdisciplinary CDRterra program<sup>2</sup> that our group leads.
- E13 TV-L position, commensurate with work experience, for three years (starting date is as soon as possible),
- career development through the LMU qualification program,
- a stimulating working environment at one of Germany's top-ranked universities, in the vibrant and internationally diverse city of Munich. Our institute is located in the centre of Munich with excellent public transport links.

Handicapped persons with comparable qualifications receive preferential status. We encourage female candidates to apply.

### Contact:

Please send an application outlining your fit for the position (including a cover letter, a curriculum vitae, copies of scientific degrees, and the names and contact information of two references) by e-mail (one PDF-attachment with max. 5MB only including all documents) with subject "RESCUE-2023LMU" to [climate.jobs@geographie.uni-muenchen.de](mailto:climate.jobs@geographie.uni-muenchen.de). Deadline for application is April 26, 2023, with job interviews (online or in Munich) of the short-listed candidates scheduled for May 9-11; the position will remain open until filled. For further information please contact Prof. Dr. Julia Pongratz ([julia.pongratz@lmu.de](mailto:julia.pongratz@lmu.de)).

<sup>1</sup> <https://www.bsc.es/research-and-development/projects/rescue-response-the-earth-system-overshoot-climate-neutrality-and>

<sup>2</sup> <https://cdrterra.de/>