

The Working Group [Coupled Human Landscape System: Risk & Resilience](#) at the [Department of Geography, University Innsbruck](#) (Austria) is seeking candidates for a

## POSTDOC POSITION (F\*M) *for Agent-Based Modelling in context of disaster risk and resilience*

(full-time, 30h per week, with the possibility to increase up to 38 h;  
for a period of four years. Starting date is to be arranged.)

### Your tasks:

- Conduct independent research on global change issues and the impact of natural hazards on communities in mountain regions;
- Analyse and further develop methods to study decision-making behaviour and everyday practices in dealing with natural hazards; and evaluation of resilience-building strategies and risk management plans.
- Evaluate resilience-building strategies and risk management plans, including the development or adaptation of an agent-based model to simulate changing socio-economic conditions and decision-making.
- Collaborate with the interdisciplinary team to enhance the conceptual model for analysing coupled human-landscape systems in mountain areas (e.g. [Hossain et al. 2020](#)) by identifying crucial couplings and interactions within the human-landscape system at different spatial and temporal scales.
- Contribute to the development of a numerical prototype for the coupled model for the human-landscape interaction system, which will be tested and evaluated together with the interdisciplinary team. Another PostDoc will focus on landscape evolution model and the hazard processes.

### Responsibilities:

- Conduct independent research;
- Manage scientific projects, including applications and implementation;
- Independent teaching as well as supervision of students in the geography study program;
- Publish scientific publications and actively participate in university self-administration.

### Your profile:

- PhD degree in the fields of e.g. geography, social sciences, computational social science, digital humanities or a related field is required.
- Expertise in social simulation, agent-based modelling and social studies and qualitative data analysis;
- Strong background in computational and programming skills;
- Experience in interdisciplinary research and respective collaboration with various disciplines. Additional experience with human-environmental interactions, coupled human-landscape (natural) systems (CHANS), risk and resilience is an asset.
- Motivation to take initiative and responsibility in your own research.
- Dedication to scientific excellence and high-quality work.
- Very good English language skills both in oral and written communication are required;
- Willingness to teach in the Bachelor's and Master's curricula of geography;
- Demonstrated publication activity in peer-reviewed journals,
- Independent team-oriented working style, project-related cooperation and communication skills.

### Our offer:

This position offers a stimulating research environment and collaborate with international experts in the fields related to the project. To learn more about the research objectives and the interdisciplinary team, please visit our [website](#).

The minimum monthly gross salary € 3'264 (for 30h per week (14 x)) according to the salary scheme of the University Innsbruck. Furthermore, the university has numerous attractive [offers](#).

**To apply**, please upload your application including (1) a curriculum vitae, (2) a list of publications, (3) statement of the past and current research experience (up to 2 pages), (4) reflections on the proposed project with your application (max. 5 pages), (5) certificates for full academic record, and (6) up to three names of references with the full contact information at the [application portal](#) (Code GEO-13509), **until July 28, 2023**. The position will be open until adequately filled.

**For further information** or inquiries, please contact Margreth Keiler (margreth.keiler@uibk.ac.at). We look forward to receiving your application and the possibility of welcoming you as a valuable member of our interdisciplinary research team.