



Doctoral Researcher, ‘Investigating geodiversity-biodiversity relationships under climate change’, in Geography Research Unit, Faculty of Science and Kvantum Institute, University of Oulu

The University of Oulu is part of the international scientific community producing new scientific knowledge and science-based solutions related to problems of society. The University of Oulu is committed to educate future pioneers for building a more sustainable, intelligent and humane world. Creating new knowledge, taking responsibility, and succeeding together are values that build a strong foundation for all our actions. We offer a working environment where individuals can cultivate their skills, do meaningful work, and develop professionally. The specialized research and service units of the University of Oulu enable extensive and diverse development and career opportunities for experts in various fields. Doctoral researchers in the University of Oulu are part of an international, multidisciplinary scientific community. Doctoral training is coordinated by the University of Oulu Graduate School (UniOGS).

University of Oulu has allocated twenty (20) 4-year doctoral researcher positions to the emerging research themes in association with the four focus institutes Biocenter Oulu, Eudaimonia Institute, Infotech Oulu and Kvantum Institute. The Emerging projects in the strategic focus areas will connect multidisciplinary research across disciplines with the spearhead projects of the University of Oulu.

We are now looking for one full-time

Doctoral Researcher

for a maximum of four years, starting at the earliest on 01.01.2023 in a research project of Dr. Julia Kemppinen in collaboration with Professor Jan Hjort and Dr. Janne Alahuhta at the Geography Research Unit, Faculty of Science. The applied position is under the Emerging projects programme 2023-2026 within the context of Kvantum Institute, which offers a high-level international multidisciplinary environment supplied with cutting-edge infrastructures in the strategic focus area “Changing climate and northern environment”.

The overall aim of the project is to investigate the geodiversity-biodiversity relationship under climate change. We are particularly interested in 1) quantifying the hierarchical mechanisms of the geodiversity-biodiversity relationship, and 2)

providing extensive field evidence across the globe to quantify climate impacts on the geodiversity-biodiversity relationship. The project combines new statistical methods in geodiversity research (e.g., structural equation modelling, hierarchical generalized additive modelling), state-of-the-art technology (e.g., microclimate loggers, plant root simulator probes), and extensive spatio-temporal data at high-resolutions (e.g., geodiversity, vascular plant biodiversity, soil moisture, local temperatures, soil nutrients). The project focuses on ecosystems most vulnerable to global warming: Arctic, Antarctic, and alpine tundra. Read more about the project: www.juliakemppinen.weebly.com/projects

The doctoral researcher position is supervised by Dr. Julia Kemppinen and Professor Jan Hjort, and the position is focused on investigating the geodiversity-biodiversity relationship at local scales. With the support and supervision of Kemppinen and Hjort, the doctoral researcher has the possibility to design their dream PhD research and the related articles around the overall aim of the project depending on doctoral researcher's academic ambition, research interests, research field background (e.g., geoscience, bioscience), and methodological background (e.g., spatial analysis, statistical modelling, process modelling, remote sensing). The doctoral researcher has the option to use the existing data to answer their research questions, and they are also encouraged to collect data of their own.

Requirements

You must hold a Master's degree or an equivalent degree (e.g. licentiate) preferably in physical geography, ecology, or related fields. Degree must have been completed with good grades (at least 60% of maximum grade, or 3/5, in both the taught studies and the Master's thesis). Ability to pursue independent research and excellent writing and fluency in English is expected.

The doctoral researcher position is intended for an Early Stage Researcher (ESR) who, according to the "European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers", is defined as a researcher in the first four years (full-time equivalent) of their research activity, including the period of research training. Applicants will either be starting their doctoral training or have completed no more than two full years of training (adjusted for possible previous part-time status) at the time the position is filled. You will carry out your doctoral studies in the Technology and Natural Sciences Doctoral Programme of the University of Oulu Graduate School and you must meet the minimal requirements to receive doctoral study rights as defined in [UniOGS](#).

What we offer

- *We offer you a place in a highly talented research group, working to solve globally significant research problems in the field of geodiversity and biodiversity research.*

- *University's wide variety of support services are at your disposal, allowing you to focus on your studies and research.*
- *In addition to modern research facilities, we offer you personnel benefits such as free occupational healthcare, support for sport services and endless opportunities to develop your skills and competences.*
- *Regular salary is paid 12 months per year, including paid leave and an additional holiday bonus in the summer.*
- *The employed person will be insured by the university and provided occupational healthcare. The Finnish government provides benefits to residents and their families, for example possibility to the national healthcare system and high-quality affordable childcare and school services.*

Salary and key terms

The salary of selected doctoral researchers will be initially set on level 2, and later on levels 2 – 4 of the national salary scale for the teaching and research staff of Finnish universities. In addition, a supplementary remuneration is given for personal achievement and performance (max. 50 %). In practice, the salary is roughly 2200 – 2700 €(before taxes) per month for an early-stage researcher, depending on the appointee's qualifications and progress of the doctoral thesis.

The positions are fixed term for maximum of four years starting earliest on 1st of January 2023. A trial period of 6 months is applied to the position.

How to apply

Applications must be submitted through **the online system by December 1st, 2022, 23:59** (Finnish local time), with the following attachments as three separate pdf files (please note that the online system has a maximum size limit of attachments):

1. **Complete CV** containing contact information of at least two referees and a list of journal and conference publications (if any). A recommended CV template can be found on the webpage of Finnish Advisory Board on Research Integrity (<http://www.tenk.fi/en/template-researchers-curriculum-vitae>).
2. **Motivation letter** describing prior knowledge, research interests and career plans (1-2 pages)
3. **Certificates/Diplomas:** Scanned electronic copies of diplomas and transcripts of the records of relevant previous degrees (MSc and BSc or equivalent). If the original documents are not in English, Finnish or Swedish, each document must be accompanied by an official certified translation into English or Finnish.

Applications sent by email will not be considered. The eligible applicants fitting best in the research profile expected for the position may be invited to an on-site or remote interview. All applicants will be notified when the selection process is completed.

For further information

- Dr. Julia Kemppinen, e-mail: [julia.kemppinen \[at\] oulu.fi](mailto:julia.kemppinen@oulu.fi)

About Oulu, Finland

Finland is one of the most livable countries in the world, with a high quality of life, safety, excellent education system, and competitive economy. The Oulu region is home to over 200 000 people making it one of the fastest growing regions in northern Finland. Oulu is a combination of beautiful, northern nature, vivid cultural life and modern technology. Oulu is also known for its highly-educated people and friendly, easy-going atmosphere. Living in Oulu is easy – everything is only max. 20 minutes away! Find out more about Oulu: <https://www.oulu.fi/university/living-in-oulu>

[Apply for the job](#)