Job Announcement

Young, modern, and research oriented... the University of Potsdam has firmly established itself within the scientific landscape since its founding in 1991. Nationally and internationally renowned scientists teach and perform research here at Brandenburg’s largest university. The University of Potsdam is successful in acquiring third-party funds, delivers outstanding performance in technology and knowledge transfer, and has a very service-oriented administration. With about 21,000 students studying at three campuses – Am Neuen Palais, Griebnitzsee and Golm – the University of Potsdam is a prominent economic factor and engine of development for the region. The University of Potsdam has a total of over 3,000 faculty and staff members and is located in one of Germany’s most scenic areas.

The University of Potsdam, Faculty of Science, Institute of Geosciences, invites applications for the following position within the group of General Geology:

Academic Staff Member
Requisition No.: 333/2020

The position is available from October 01, 2020. The salary is determined by the collective bargaining agreement for public employees in Germany (TV-L 13 Ost). The position is for 40 hours per week (full-time contract). This is a temporary position limited to a term of 2 years in accordance with Section 2 subsection 1 of the Academic Fixed-Term Contract Law (WissZeitVG).

This post-doctoral position is opened within the framework of the ERC Project “COOLER” (Climatic Controls on Erosion Rates and Relief of Mountains Belts). The main aim of the COOLER project is to advance our understanding of the couplings between tectonic and climatic processes through the development of novel tools and numerical models that record erosion rates and relief changes with unprecedented resolution and link these to potential driving mechanisms. Specifically, the project will (1) develop new high-resolution, ultra-low temperature $^4$He/$^3$He thermochronology through setting up a new laboratory in Potsdam; (2) adapt existing numerical modelling tools to include the most recent knowledge on the kinetics of thermochronological systems and developing sample-specific model predictions; (3) couple these tools to glacial landscape-evolution models; (4) study potential feedbacks between glacial erosion and tectonic deformation in carefully selected relevant field areas.

Responsibilities:
Within the overall project, you will be responsible for redesigning the Pecube code to enable sample-specific thermochronometer predictions using the most recent quantitative kinetic models for He diffusion and fission-track annealing in minerals, including $^4$He/$^3$He degassing spectra. Parallel to the development of new prediction capabilities in Pecube, you will work on coupling the glacial erosion model $iSOSIA$ to Pecube and running initial coupled models to develop the conceptual framework that will guide field studies and sample collection. This will be done in close collaboration with the university of Aarhus (Denmark) and will include a 2-month stay in Aarhus. You will further be involved in the supervision and mentoring of PhD
students that will start their projects focusing on specific target areas in a later stage of the project.

Qualifications:
You have a PhD in Earth Sciences, geophysics or similar fields and you have demonstrable experience with numerical modelling. Preferably, you have experience in quantitative interpretation of thermochronology data, using Pecube or other modelling tools, as well as experience with landscape-evolution modelling. You have good oral and written communication skills in English, good interpersonal skills, are comfortable working in a team and developing collaborations with other institutes.

Under the laws of the federal state of Brandenburg, employees under this contract are permitted to dedicate at least 33% of their contract time for their scientific qualification.

The University of Potsdam aims to increase the proportion of women in research and teaching and therefore invites qualified applicants to apply. The University of Potsdam values the diversity of its members and pursues the goals of equal opportunities regardless of gender, nationality, ethnic and social origin, religion/belief, disability, age, sexual orientation or identity. In the case of equal suitability, women within the meaning of Section 7 (4) BbgHG and severely disabled people will be given preferential consideration. Applications from abroad and from persons with a migration background are expressly welcome.

Applications should include the following components: CV, names of two referees, letter of motivation, a record of academic degrees including a transcript of records. Applications should be sent in a single PDF file to Prof. Dr. Peter van der Beek (pvdbeek@geo.uni-potsdam.de). The deadline is 9th June 2020. Do not hesitate to contact Prof. van der Beek in case you require any additional information.

In order to return your application documents, we request that you include a self-addressed stamped envelope.

Potsdam, 19 May 2020