

The [International Doctorate Program M³OCCA](#) funded by the Elite Network of the Bavarian State Ministry of Science and The Arts invites applications for a

doctoral candidate position (Entgelt-/Bes.Gr. TV-L E13, 75%, 4 years)

at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) in Erlangen, Germany. The position will **start 1 June 2026** (fixed start date).

Firn distribution and its density structure plays a vital role in the mass balance evolution of glaciers. The temporal variability is especially high during periods of strong climatic changes. The candidate will integrate existing and improved firn models into mountain range evolution schemes, in order to improve the understanding of changes in the firn body and structure for glacier mass balance and climate response. For this purpose, the candidate needs not only to combine existing model packages, but to develop new approaches and combine field and remote sensing data with climate information for a spatially distributed and transient model toolbox.

Required skills:

- MSc/MEng in Geophysics, Earth Sciences, Physics, Computer Sciences, Applied Mathematics or a related field
- Programming skills (Python, R, shell or similar)
- Experience with scientific computing and development of numerical models
- Basic knowledge of glaciological and physical processes
- Good reporting and presentation skills
- Excellent level of written and spoken English
- Ability to work independently, to critically assess own results and to cooperate within a wider research team across disciplines

Desired and advantageous skills are:

- Basic knowledge of climatological processes and interaction with the cryosphere
- Interest in geophysical techniques for snow, ice and firn investigation
- Experience in field work in challenging environments
- Open mind for interdisciplinary work and intense across-field cooperation

The position is part of the coordinated international doctorate program M³OCCA (9 core funded and up to 11 associated doctoral researchers). The active participation and interaction in the joint research seminars, workshops and annual research retreats is mandatory.

Proficiency in German is advantageous but not required, as the working language is English. However, we strongly recommend to learn German for daily life (funds for German language classes are available).

The candidate will be placed at the [Bavarian Academy of Sciences and Humanities](#) in Munich, which offers a friendly working environment in a group of specialists for mountain glaciology and geodesy.

The Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) is seeking to augment the number of women in research and teaching and specifically addresses female scientists to

apply for this position. We further encourage persons with disabilities to apply. If desired, a member of the equal opportunity office of FAU can participate in the selection process without any disadvantage for the applicant.

For your application, please send a single PDF to idp-mocca@fau.de stating "MOCCA SP 2.3" as subject. The PDF should comprise:

- Cover letter (stating your background and motivation for this project)
- CV, list of publications (if any)
- University degree certificates
- Transcript of records, other certificates (if any)
- Two addresses for potential reference (if any)
- A short research concept how you would approach the topic (max. 2 pages)

Deadline for application: **7 December 2025**, the position is open until filled.

Further information on the sub-project:

Dr. Christoph Mayer, Geodesy and Glaciology, Bavarian Academy of Sciences and Humanities, phone: +49 89 23031 1260, e-mail: Christoph.Mayer@badw.de