

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, 100%, 4 years)

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

The candidate will develop and deploy deep learning techniques to improve the mapping of debris covered glaciers and inference of debris-thickness. For this, multi-mission satellite data shall be integrated and a global applicable methodology and work flow developed. There is potential for participating in field work, however this is not mandatory for this sub-project.

Required skills:

- MSc/MEng in Geography, Earth Sciences, Physics, Computer Sciences, Applied Mathematics or a related field
- Programming skills (Python, R, shell or similar)
- Affinity for scientific computing and development of processing algorithms
- Knowledge of processing of different satellite mission data
- 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:

- Interest for understanding Earth System processes and their complex interactions
- Background in machine learning
- Experience in big data handling and high-performance computing
- Demonstrated capacity for independent thinking and diligence

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 FAU [Institute of Geography](#), which offers a vivid working environment with specific research focus on mountain and polar regions.

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 2.1" 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:

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