



The Department of Geography at the Justus Liebig University in Giessen / Germany, metropolitan region of Frankfurt / Main invites applications for a

**PhD position (75% of the regular working hours)  
as part of the DFG funded project “Chronology of fluvial erosion. - A scenario  
of quaternary geodynamics from the model region Baza/Guadix”.**

The research project aims at the reconstruction of the middle- to late-Pleistocene evolution of the fluvial system in the Baza Basin (Cuenca de Baza/Guadix) in the north-eastern part of Andalusia (Spain). Until the middle-Pleistocene, the research area was a widespread, runoff-free depression. Starting in the Pliocene, sediments of all grain sizes from the surrounding mountains were transported into this endorheic basin. After its capturing by a source river of the Rio Guadalquivir, a new fluvial system with a total length of 90 km was established which has cut into the original basin sediments to a depth of 350 metres. As part of the project, the velocities of backward erosion and river incision will be approximated by applying a high-resolution luminescence dating approach to fluvial terrace material.

The project includes a close cooperation with the Technical University Dresden, the latter dealing mainly with GIS and remote sensing analysis, field mapping and sedimentological analysis. The research project located at the Justus Liebig University in Giessen (JLU) will primarily deal with the establishment of chronostratigraphies, applying innovative luminescence dating techniques. For this purpose, sediment samples from different sediment archives will be taken during field work in Andalusia.

Next to a modern and fully equipped luminescence laboratory, we offer an attractive working environment in a dynamic group of geoscientists and luminescence specialists, dealing with earth surface processes for reconstructing landscape evolution in the Quaternary.

**Your qualifications and competences**

- Completed Master's or equivalent university degree in Geosciences or related fields.
- Strong interest in the geoscientific topics of the project and in luminescence dating and data analyses (experience in luminescence dating is of advantage).
- Willingness for carrying out field work in Spain and attending international conferences.
- Good English language skills.

The position is offered as a part-time position (75% of the regular working hours) for three years starting in spring 2022. The salary is in accordance with the collective labour agreement of the State of Hessen (E 13 TV-H; 75%). PhD candidates are members of our graduate school, which aims to help young academics thrive through all stages of their training. If you have any further questions, please do not hesitate to contact Dr. Thomas Kolb by e-mail ([thomas.r.kolb@geogr.uni-giessen.de](mailto:thomas.r.kolb@geogr.uni-giessen.de)).

JLU aims to employ more women in academic research. We therefore particularly encourage female candidates to apply. JLU is regarded as a family-friendly university. Applicants with children are very welcome. Applications from disabled people of equal aptitude will be given preference.

Please send your application no later than **09.12.2021** by e-mail (one PDF-attachment with max. 5 MB including all documents) to [thomas.r.kolb@geogr.uni-giessen.de](mailto:thomas.r.kolb@geogr.uni-giessen.de). The application should include an informative cover letter, a CV, a 1-page letter of motivation, copies of study certificates and the names and contact information of two references.