

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

PhD position in Landscape Evolution modeling - LEM

The Giessen working group is dealing with earth surface processes at different temporal and spatial scales, among others with Holocene soil erosion of mesoscale river catchments. Causes for soil erosion – triggered by climate or human activities – are investigated and the spatio-temporal pattern of soil erosion and its sediments are assessed by empirical approaches, using geoscientific field and laboratory methods. For one fluvial catchment, we intend to apply a numerical landscape evolution model (LEM), e. g. CAESAR, to investigate the spatio-temporal processes of erosion, transportation and sedimentation. Combining the model outcomes with the empirical field data, we expect to optimize the numerical model and based on this, to establish spatio-temporal scenarios of erosion and sedimentation patterns.

Specific Duties:

- Applying landscape evolution models (LEMs) to a river catchment in N-Bavaria / Germany.
- Sensitivity analyses of the applied LEMs.
- combining empirical field data and LEMs.

Requirements:

- A Master's degree in Geosciences or related fields.
- Strong curiosity in the project's topic and strong interest in modeling and its combination with field data (experience in modeling and programming are of advantage).
- Willingness for trainee programs at cooperating working groups in Germany and abroad.

The PhD position is offered for three years starting as soon as possible. Payment will be in accordance with TV-H 13. Your work place will be located in Giessen, a university town north of Frankfurt and is easy to reach by public transport or bike. We offer an interesting and inspiring working environment and encourage especially female candidates to apply. Handicapped persons with comparable qualifications receive preferential status. PhD candidates are members of our graduate school, which aims to help young academics thrive through all stages of their training.

Please send an application outlining your fit for the position (including an informative cover letter, a curriculum vitae, copies of scientific degrees including grades, and the names and contact information of two references) by e-mail (one PDF-attachment with max. 5MB only including all documents) to markus.fuchs@geogr.uni-giessen.de. For further information please contact **Prof. Dr. Markus Fuchs** using the above given e-mail address.