universität freiburg

The newly founded Chair of Modelling of Social-Ecological Systems at the Faculty of Environment and Natural Resources, University of Freiburg invites applications for a PhD position in simulation modelling of forest management (m/f/a).

PhD position in simulation modelling of forest management (m/f/a)

As part of the newly founded Chair of Modelling of Social-Ecological Systems at the Faculty of Environment and Natural Resources, University of Freiburg, we invite applications for a 3-year PhD position in simulation modelling of forest management.

The project

Forests provide essential ecosystem services to society, but their capacity to do so is increasingly challenged by global change. The capacity of forests to adapt to these changes depends not only on ecological processes, but also on the people and institutions who manage them. Forests are managed by a variety of different actors, from small forest owners to large enterprises and state forests, and these actors can have different objectives and respond differently to ongoing changes, such as forest disturbances. However, the interactions between forest ecological dynamics and the diversity of forest managers are still poorly understood. In this project, you will build on an existing forest dynamics model (iLand, **https://iland-model.org/**), which includes an agent-based model of forest managers who respond dynamically to forest change and disturbances. Based on interactions with stakeholders, you will model the behavior and decision-making of different types of forest management actors, as well as their interactions. You will then use this model to investigate how different configurations of actors and institutions influence the dynamics of Central European forest landscapes and their resilience. This knowledge can help forest managers and policy-makers develop effective strategies for adapting European forests to global change.

Candidate profile

You have a strong background in forestry, ecology, environmental sciences, or similar, and a strong interest in interdisciplinary research, linking ecology and social sciences. You have a good command of English (written and spoken), are proficient in R (or a similar programming language) and you enjoy coding. Previous experience using forest simulation models, agent-based models, or coding in Javascript is an advantage.

The position

This PhD position will be based at the new Chair of Modelling of Social-Ecological Systems at the Faculty of Environment and Natural Resources, University of Freiburg with Dr. Ana Stritih, and will include a close collaboration with researchers from the Ecosystem Dynamics and Forest Management group at the Technical University of Munich.

The salary is the German standard for doctoral students (TV-L E13, 65 % of a full scientist salary).

Your application will consist of a letter of motivation, a CV, academic transcripts (non-official copies are acceptable), and contact details of at least two academic references. Please send your application as a single PDF by email to Dr. Ana Stritih (**dekanat@unr.uni-freiburg.de**) with the subject “PhD position in simulation modelling”

The position is limited to 3 years. The salary will be determined in accordance with E13 TV-L.

We will be particularly pleased to receive applications from women for the position advertised here.

Application

Please send your application including supporting documents mentioned above citing the reference number 00004196.

Please send your application to the following address in written or electronic form:

Dr. Ana Stritih
Faculty of Environment and Natural Resources, University of Freiburg
Dean's office
Hebelstr. 25/Vorderhaus
D-79085 Freiburg

E-Mail: **dekanat@unr.uni-freiburg.de**

Online application via the apply now button on this page.

For further information, please contact Andreas Friedrich on the phone number +49 761 203-3601 or E-Mail **dekanat@unr.uni-freiburg.de**.