

**Job offer Ref. # 11-19003**

The Senckenberg Gesellschaft für Naturforschung (SGN), a member institution of the Leibniz Association, with almost 800 employees and its headquarters in Frankfurt am Main, is conducting integrative natural history research with leading research institutions in six federal states. The Senckenberg Biodiversity and Climate Research Centre (SBIK-F) explores interactions between biodiversity and climate.

For an EU funded integrated BiodivERsA project with partners in Scandinavia, France and Spain, we invite applications for a

**Vegetation/Ecosystem modeller (m/f/d)**  
(full time position 100%, 3 years)

The overall project aims at developing scenarios of climate and air pollution impacts on mountain ecosystems in Scandinavia, the Pyrenees and the Guaderma mountains, in close collaboration with stakeholders and government institutions. High-resolution climate and air pollution scenarios will be provided by the Swedish partner (SMHI). The postdoc here should adapt the Lund-Potsdam-Jena General Ecosystem Simulator (LPJ-GUESS) for the two southern study regions. Then the model should be used to derive future scenarios for changes in vegetation and ecosystem services, such as carbon stock and habitats for biodiversity. The results should guide climate adaptation and mitigation activities.

**Your tasks**

- Parameterize LPJ-GUESS to represent the main vegetation types in the Pyrenees and the Guaderma mountains.
- Implement current land use patterns in the study region, in particular grazing
- Test the model against independent data, such as timber stocks and satellite-derived estimates of vegetation cover and productivity
- Implement functions to represent vegetation damage by ground-near ozone
- Run LPJ-GUESS with future scenarios for changes in climate and air pollution
- Visit the study areas to get familiar with the regional vegetation, ecology and land use
- Write manuscripts and publish results in international journals in cooperation with the members of the project team
- Interact with regional stakeholders and government agencies
- Contribute to scientific outreach activities, including a web-portal for stakeholders and decision makers

**Your profile**

- Master or PhD degree in Biology, Biogeography, Environmental Modelling, Ecology, or related subjects such as Environmental Physics.
- Substantial experience with computer programming, preferably in C/C++
- Experience in vegetation or ecosystem modelling
- Knowledge of plant physiology and ecology
- Documented ability to publish scientific papers in international journals
- Research experience in interdisciplinary working environments
- Excellent written and oral communication skills in English

**What is awaiting you?**

- An interesting and relevant task in an interdisciplinary research team with climate and vegetation modellers, conservation practitioners, stakeholders and government agencies
- A dynamic interdisciplinary research environment specialized on investigating interactions between biodiversity, ecosystem functioning and climate

# SENCKENBERG

world of biodiversity

Salary and benefits are in accordance with a public service position in Germany (TV-H, E 13, 100%). The contract shall start as soon as possible, ideally 1<sup>st</sup> of April 2019. The Senckenberg Research Institute supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference. The duty station will be at the Senckenberg Biodiversity and Climate research Centre, Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft für Naturforschung.

Please send your application until **March 15<sup>th</sup>, 2019**, preferably by e-mail (attachment in a single pdf file), mentioning the reference of this position (**Ref. # 11-19003**) and including a letter outlining your suitability and motivation, 2 relevant publications, a detailed CV, all transcripts and grades and contact details of two potential references:

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