

Job announcement ref. #11-26002

Senckenberg – Leibniz Institution for Biodiversity and Earth System Research (SGN), headquartered in **Frankfurt am Main**, is seeking to fill the following position at the **Senckenberg Biodiversity and Climate Research Centre (SBiK-F)**, starting as of **01. April 2026**:

Doctoral or Postdoctoral Researcher (f/m/d)
Global Vegetation and Biome Modelling
(Full-Time / Part-Time options are available)

Location:	Frankfurt
Employment scope:	Doctoral (75%) / Postdoctoral Researcher (up to 100%)
Type of contract:	Fixed-term contract until 30 September 2029
Remuneration:	Collective agreement of the state Hesse (TV-H) / E13

Senckenberg is one of the world's leading research institutions in the field of Biodiversity and Earth System Research, with eight research institutes across Germany and scientists from over 40 nations. Our headquarter is located in the thriving commercial metropolis of Frankfurt (Mainhattan) in the heart of Germany, which also hosts one of our most famous facilities, the Senckenberg Natural History Museum. The mission of the Senckenberg Biodiversity and Climate Research Centre is to study the complex interactions between biodiversity and climate change.

The announced position is embedded in a coordinated Focus Unit Project (FUN) within the TERRA (Terrestrial Geo-Biosphere Interactions in a Changing World) excellence cluster (www.terra-cluster.org), a collaboration between Senckenberg and the Universities of Tübingen and Hohenheim. The focus research unit brings together biologists, geologists and earth system modellers who together aim at fundamentally advancing our understanding of "The past and future of the C₄ grasslands of the world". We will develop a novel approach for simulating C₄ grasslands in interaction with C₃ grasslands and trees based on Eco-Evolutionary Optimality (EEO) within the framework of the LPJ-GUESS Dynamic Global Vegetation Model. Geologists in the team will advance the state-of-the-art in reconstructing Oligocene to Miocene C₃/C₄ transitions, which will be used to test the new vegetation model. The new EEO-based vegetation model should then also be used to predict future transitions and biome shifts to ultimately answer the question to what extent C₄ grasslands, savannahs and their unique biodiversity will persist under future climate change.

Your tasks

- Further develop our implementation of the EEO-based P model for photosynthesis within LPJ-GUESS
- Test the model against observations of the current distribution of C₄ grasslands and reconstructions of past dynamics, including the time when they first expanded across the globe
- Use the model to predict the future of C₄ grasslands and savannahs using the latest CMIP6 climate projections.
- Collaborate with geologists and climate modellers in the team to infer the climate conditions and CO₂ concentrations at which C₃/C₄ transitions occurred in the past
- Publish results in scientific journals with highest scientific standards

Your Profile

- Master or PhD degree in Biology, Plant Ecology, Environmental Modelling, Geography, Environmental Physics or related fields
- A strong interest in plant ecology and climate change
- Strong Programming skills in C++, the language of the LPJ-GUESS code, or another fundamental programming language such as C or Fortran
- Strong expertise in data analyses and statistics
- Experience in ecological or environmental modelling
- Documented ability to publish scientific papers in international journals (for postdoctoral candidates)
- Research experience in interdisciplinary working environments is beneficial
- Excellent written and oral communication skills in English
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What We Offer

- Opportunity to work closely with leading experts in Earth System Research as well as paleoenvironmental reconstructions.
- You will be part of the new Graduate School of Terrestrial Geo-Biosphere Interactions
- A dynamic work environment in Frankfurt, a diverse and vibrant city offering a high quality of life.
- Flexible working hours – mobile working options – Support with childcare or caring for family members (certified by the "audit berufundfamilie") – employee ID card with free admission to municipal museums – annual special payment – collectively agreed vacation entitlement – company pension plan (ZVK)

Senckenberg is committed to diversity. We benefit from the different expertise, perspectives and personalities of our staff and welcome every application from qualified candidates, irrespective of age, gender, ethnic or cultural origin, religion and ideology, sexual orientation and identity or disability. Women are particularly encouraged to apply, as they are underrepresented in the field of this position; in the case of equal qualifications and suitability they will be given preference. Applicants with a severe disability will be given special consideration in case of equal suitability. Senckenberg actively supports the compatibility of work and family and places great emphasis on an equal and inclusive work culture.

How to apply?

Please send your application (letter of motivation, CV, contact details of two references, and certificates) electronically (as a single PDF) to recruiting@senckenberg.de under the heading "Application: Your Name [FUN05_1]" and stating the **reference #11-26002 by 22 February 2026**.

Senckenberg Gesellschaft für Naturforschung
Senckenberganlage 25
60325 Frankfurt a.M.
E-Mail: recruiting@senckenberg.de



If you have any specific questions about the position, please contact Prof. Dr. Thomas Hickler at Thomas.Hickler@Senckenberg.de

For data protection information on the processing of personal data as part of the application and selection process, please refer to the privacy policy on our homepage at <https://www.senckenberg.de/en/imprint/>

With the application you agree that your personal data will be shared among the participating institutions (University of Tübingen, University of Hohenheim, Senckenberg) for the purpose and over the duration of the recruiting procedure.

Please visit our website at www.senckenberg.de for further information about the Senckenberg Gesellschaft für Naturforschung.