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## Job announcement ref.#11-21005

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.

The Senckenberg Gesellschaft für Naturforschung (SGN) seeks in the scope of the EU-funded integrated project Horizon2020 FirEUrisk (Developing a holistic, risk-wise strategy for European wildfire management), at SBiK-F in Frankfurt am Main a

# Research Associate (m/f/d) in Vegetation Modelling

(full time position)

This position will combine mechanistic fire modelling with machine learning calibration and downscaling to produce policy-relevant fire predictions at the European scale within the FirEUrisk project. FirEUrisk will develop, evaluate and disseminate a science-based integrated strategy to: 1) advance current wildfire risk assessment systems, 2) to produce effective measures to reduce current fire risk conditions, and 3) to adapt management strategies to expected future climate and socio-economic changes.
The project with more than 30 partners builds upon close collaboration between researchers, stakeholders and citizens, aiming at developing guidelines and policy recommendations to improve current systems and practices from regional to EU scales. FireEUrisk includes experts and activities in remote sensing, forestry and ecology, and it is anticipated that data from these activities shall inform the modelling work done here. You will primarily contribute to the work package on adaptation to future fire regimes.

**Your tasks**

- Adapt existing fire modules of the Lund-Potsdam-Jena General Ecosystem Simulator (LPJ-GUESS) to European conditions (most likely the SPITFIRE module)
- Improve the calibration of the model with new data sets, also using machine learning techniques
- Use the model to develop scenarios of future impacts of climate change and socioeconomic drivers on ecosystems, fire and ecosystem services
- Co-lead the task to generate future scenarios (to which several experts in climate and climate scenario data, land use change scenarios and vegetation-fire modellers will contribute)
- Contribute to dissemination activities towards policy makers and stakeholders
- Disseminate results in scientific journals and more stakeholder-oriented formats
- Participation in meeting/workshops in Germany and across the EU are expected

**Your profile**

- Master or PhD degree in Biology, Ecology, Environmental Modelling, Geography, Environmental Physics or related fields
- Strong expertise in computer programming, preferably in C/C++ and R
- Experience in ecological or environmental modelling
- Documented ability to publish scientific papers in international journals
- Research experience in interdisciplinary working environments
- Excellent written and oral communication skills in English
- Ideally also experience in applied projects and stakeholder interaction

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**What is awaiting you?**

- An interesting and relevant task in a large interdisciplinary research team
- Becoming a member of dynamic team at Senckenberg specialized in ecosystem modelling and climate impact research
- The possibility to build and extend your network with scientists at an international level and to attend national and international conferences
- Flexible working hours – mobile working – leave of absence due to family reasons – parent-child-office (certified by the audit berufundfamilie) – annual special payment – company pension scheme – Senckenberg badge for free entry in the Senckenberg museums – leave of 30 days/year – discounted job ticket

Salary and benefits are according to a public service position in Germany (TV-H E 13, full time position). The position shall be filled as soon as possible, subject to the cooperation agreement and the grant agreement coming into force. The position is restricted to 31 months.

SGN supports equal opportunity of men and women and therefore strongly invites women to apply. Equally qualified handicapped applicants will be given preference.

The place of employment will be Frankfurt am Main, Germany. The employer is the Senckenberg Gesellschaft für Naturforschung (SGN).

**You would like to apply?**

Please include the reference to this position (**ref.#11-21005**) in the subject line and include

- ✓ **a cover letter outlining your suitability and motivation** to apply,
- ✓ **a detailed CV,**
- ✓ **your full publication list** (if available),
- ✓ **your full academic credentials/certificates** and
- ✓ **contact details of two academic references, as well as copies of your two most important publications**.

Please submit your application (**a single PDF** file) using the online application form on our website, or hand it in by e-mail **by 16th May 2021.**

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Zertifikat seit 2012
audit berufundfamilie

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