

Job announcement ref. #13-25005

The **Senckenberg Institute for Plant Form and Function** (SIP) in Jena is seeking to fill the position of a

Junior Group Leader (m/f/d) in Digital Collectomics Developing modern technologies for collection-based research

Location: Jena, Germany

Employment scope: Full-time (40 hours/ week) / part-time options are available

(minimum 75%)

Type of contract: The contract shall start at the earliest possible date. The

position is initially limited. The type of time limitation depends on individual profile and legal framework (maximum 6 years). A later permanent employment (Tenure Track) is intended after a positive evaluation. Opportunities for advancements to a professorship exist and depend on the successful acquisition of funds for outstanding

excellence.

Remuneration: Collective agreement of the German Länder, TV-L E 13

Founded in 1817, Senckenberg Society for Nature Research (SGN) counts among the world's leading research institutions in the field of biodiversity. At our twelve sites in Germany, scientists from over 40 nations conduct cutting-edge research on an international scale.

In April 2024, the **Senckenberg Institute for Plant Form and Function Jena (SIP)** was newly founded in cooperation with the Friedrich Schiller University Jena around the Herbarium Haussknecht. Jena is a research city with state-of-the-art scientific facilities. In SIP, the four departments Functional Plant Biodiversity, Integrative Plant Taxonomy, Ecology and Evolution of Bryophytes and Digital Collectomics work together to analyse Anthropocene Biodiversity Change using collection based modern and innovative methods in large temporal depth and on broad spatial scale.

Senckenberg is committed to study the causes and effects of biodiversity loss in the Anthropocene. As part of our strategic development, we launched an ambitious long-term research effort in "Anthropocene Biodiversity Loss" encompassing the modules "Collectomics", "Biodiversity Genomics", and "Solution Labs". Objectives include the transformation of natural history collections into the digital era, studying biodiversity from the genome to the ecosystem levels and offering exploratory spaces for science and society to develop common solutions to Anthropocene challenges.



Within this research effort, Senckenberg takes innovative steps in collection-based research and data science. The objective of "Collectomics" is to make current and future natural history collections digitally accessible and to improve integration and collaboration across regions, collections, and disciplines. This will enable broader, more holistic biodiversity research, for the benefit of people and nature.

We are looking for an internationally recognized scientist (m/f/d) in the field of computer or natural sciences to develop modern technologies for collection-based research with a focus on herbaria. The successful candidate (m/f/d) will lead a team consisting of a programmer and a scientist that support the implementation of your research ideas to develop modern technologies for collection-based research during the first two years.

Your Tasks

- Exploration, development and implementation of methods for collection digitization and automated extraction and analysis of information from collection material with a specific focus on herbaria (e.g. plant traits, chemical values, metadata from herbarium specimens) and corresponding modelling in the field of biodiversity research
- Conceptual development and integration of databases including exchange protocols to existing collections of Senckenberg and beyond
- Responsibility for the maintenance of plant and herbarium related databases
- Cooperation with scientists from other Senckenberg Institutes, including the Senckenberg data and modelling centre, and local institutes in and around Jena (e.g., the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig) as well as international networks
- Participation in the MSc Evolution, Ecology and Systematics at Friedrich Schiller University Jena through the development of interdisciplinary courses in the fields of computer science and biology
- Collaboration in establishing and developing the profile of the new Senckenberg institute in Jena through the implementation of modern technologies for collection-based research ("Digital Collectomics").

Your Profile

- Doctoral degree in computer science or natural science, preferably biology, but in this case with proven expertise in the field of computer science or using computer vision methods
- Excellent knowledge of the development and implementation of methods in the field of digitization, artificial intelligence, machine learning and/or 2D/3D imaging and corresponding modelling in the field of biodiversity research, documented through publications in international peer-reviewed scientific journals
- Interest in scientific and natural history collections (herbaria) and in biological questions as well as in inter- and transdisciplinary work in research and teaching
- Experience in the acquisition and implementation of third-party funded projects
- Ability to provide dedicated leadership
- Fluency in English both spoken and written is mandatory; good knowledge of German or willingness to learn German is advantageous



- Motivation, commitment and the ability to develop and implement own research ideas
- Experience in guiding students, staff or entire workgroups
- Team spirit

What can you expect?

- An attractive, responsible and challenging position in a globally recognized research institution with motivated and professional colleagues
- A dedicated working group (1 PostDoc, 1 programmer) during the first two years to provide excellent starting conditions until own funding is acquired
- Opportunities for the advancement to a professorship, if funds for outstanding excellence such as DFG's Emmy Noether or Heisenberg programme, Alexander von Humboldt professorship, ERC grant or similar is obtained.
- A vibrant, international team of scientists in Jena and at Senckenberg with collectionbased research programs, focussing on understanding the Anthropocene Biodiversity Change
- Excellent infrastructures and collaborations opportunities at SIP embedded in a lively research environment in Senckenberg and the Friedrich Schiller University Jena
- Opportunities to participate in teaching and outreach activities, e.g. at Friedrich Schiller University Jena and the Natural History Museums of Senckenberg.
- A salary that reflects the responsibilities of the position and the experience of the candidate, based on the German collective agreement for public service
- Flexible working hours, annual special payment, company pension scheme. 30 days holidays, strong support for work-life balance (certified by "audit berufundfamilie")

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 us your application documents containing the following documents in a single PDF file:

- a letter of motivation,
- a CV with publication list and academic achievements
- copies of certificates and diplomas
- a research concept for Digital Collectomics Developing new technologies for collection-based research with your plans to acquire funds of high outstanding excellence



in electronic form by 15 August 2025 to <u>recruiting@senckenberg.de</u> referring to the reference number ref. #13-25005 or apply directly on our homepage using the online application form <u>Online bewerben</u> | <u>Senckenberg Gesellschaft für Naturforschung.</u>

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E-Mail: recruiting@senckenberg.de



For specific questions about this role, please contact Prof. Dr. Christine Römermann at christine.roemermann@senckenberg.de.

Join us in advancing ecological research through innovative technology! We look forward to your application!

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/

For further information about the Senckenberg Society for Nature Research please visit www.senckenberg.de