UNIVERSITY OF COLOGNE


Foto: Jörn Henn

Faculty of Mathematics and Natural Sciences

Postdoctoral scientist in interdisciplinary floodplain research (f/m/x)

Institute of Zoology, General Ecology research group

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

Floodplains are dynamic, valuable ecosystems increasingly threatened by river regulation, land use, and climate change. The University of Cologne's project "The Rhine Floodplain – a Biogeochemically Coupled System under Stress" investigates how altered hydrology affects sediment dynamics, biodiversity, food webs, microbial processes, and greenhouse gas emissions.

YOUR TASKS

- Develop a mechanistic framework linking hydrological drivers to biotic, sedimentary and biogeochemical floodplain processes
- Derive inundation and connectivity metrics from water-level and sedimentary records as well as an existing hydronumeric model
- Assess aquatic and terrestrial habitat availability under past and projected water levels
- Lead concept-driven synthesis of floodplain functioning in an interdisciplinary network of bio- and geoscientists
- Coordinate the project, joint sampling design and field campaigns
- Publish as lead author and contribute to a planned Collaborative Research Centre
- Co-supervise students and co-organise an international summer school

YOUR PROFILE

- PhD in hydrology, physical geography, geosciences, ecology or a related field
- Strong publication record appropriate to career stage
- Strong skills in hydrological data analysis (R or Python) and GIS-based spatial analysis
- Experience with hydronumeric modelling and/or habitat suitability modelling
- Interest in linking physical drivers with ecological and biogeochemical processes
- Experience in fieldwork
- Experience in coordinating collaborative research is desirable
- Excellent scientific writing and communication skills in English (C1 equivalent) are essential, some knowledge of German is beneficial

WE OFFER

- Exciting research in an interdisciplinary project with several PhD students
- A diverse working environment with equal opportunities
- Support in balancing work and family life
- Flexible working time models
- Extensive advanced training opportunities
- Occupational health management offers

The University of Cologne promotes equal opportunities and diversity. Women will be considered preferentially in accordance with the Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from all suitable candidates regardless of their gender, nationality, ethnic and social origin, religion, disability, age, sexual orientation and identity.

The position is available from 1 February 2027 on a full time basis with 39,83 hours per week. The position is to be filled for a fixed term until 31 January 2030. If the applicant meets the relevant wage requirements and has the appropriate personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications (without a photo) under https://jobportal.uni-koeln.de. The reference number is Wiss2611-01.
The application deadline is 4 December 2026.
For further inquiries, please contact Professor Dr Patrick Fink at (patrick.fink@uni-koeln.de) and take a look at our FAQs.

HR EXCELLENCE IN RESEARCH