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## Scientist (f/m/x) for data engineering and integration

Apply now

### Place of work

Leipzig

### Working time

working time 100% (39 hours per week)

### Contract limitations

limited contract / limited to 3 years

### Salary

Remuneration according to the TVöD public-sector up to pay grade 13 including attractive public-sector social security benefits.

### Contact

**Your contact for any questions you may have about the job:**

Dr. Jana Schor  
jana.schor@ufz.de

Prof. Dr. Jörg Hackermüller  
joerg.hackermueller@ufz.de



UNTERZEICHNET



### The UFZ

The Helmholtz Centre for Environmental Research (UFZ) with its 1,100 employees has gained an excellent reputation as an international competence centre for environmental sciences. We are part of the largest scientific organisation in Germany, the Helmholtz association. Our mission: Our research seeks to find a balance between social development and the long-term protection of our natural resources.

### The job

Scientists of the UFZ Research Unit Chemicals in the Environment (RU CITE) aim to understand chemical exposure's hazards to human and ecosystem health. Most European freshwater bodies have poor ecological status, and chemical pollution plays a significant role in this problem. Since environmental chemicals occur in intricate mixtures, we investigated the significance of combined chemical effects on freshwater bodies, how many substances drive the mixture risk, and what this means for chemical regulation. We have recently developed an approach that integrates heterogeneous data of limited interoperability and uses a knowledge graph to model relationships in the data. Linked with the European Partnership on Chemical Risk Assessment (PARC), we aim to advance this approach towards a complex data product allowing the combined analysis of chemical effect and use, chemical and ecological monitoring, and hazard data.

In this context, we are currently offering a Scientist position in data engineering and integration (m/w/d)

### Your tasks

The project aims to develop, apply, and provide data infrastructures and integration methods to tap the full potential of complex data products of chemical effect, monitoring, and hazard data.

- Develop and implement data infrastructures to integrate toxicological data with data from other domains, like chemical usage or production or the chemical conduct in our environment.
- Deploy semantic information systems like ontologies and knowledge graphs.
- Apply developed products to investigate frequently observed chemical mixtures and to derive substances/mixtures of emerging concern from the data resource.

### We offer

- Excellent technical facilities which are without parallel
- The freedom you need to bridge the difficult gap between basic research and close to being ready for application
- Work in inter-disciplinary, multinational teams and excellent links with national and international research networks
- A vibrant region with a high quality of life and a wide cultural offering for a balance between family and professional life
- Interesting career opportunities and an extensive range of training and further education courses

### Your profile

We are looking for a candidate working at the intersection of chemistry, environmental science, and data science, ideally fulfilling the following criteria:

- Master's degree in either bio-/cheminformatics, computer science, or a similar field
- A Ph.D. or several years of work experience in computer science is desirable
- A strong interest in contributing to computational approaches in toxicology and environmental health by designing and developing open-source software packages
- Hands-on experience in programming using Python or R
- Experience in setting up and working with graph databases, e.g., neo4j, and with database querying languages, e.g., CYPHER, SQL
- Experience in developing software packages is desirable
- Ability to work independently and motivation to work in an interdisciplinary team
- Excellent knowledge of written and spoken English

Apply now

Application deadline: 02.07.2023

### Diversity and Inclusion

The UFZ has a strong commitment to **diversity** and actively supports **equal opportunities** for all employees regardless of their origin, religion, ideology, disability, age or sexual identity. We look forward to applications from people who are open-minded and enjoy working in diverse teams.

### Important

Please submit your application via our online portal with your cover letter, CV (please omit your **photo**, age, or marital status) and relevant attachments.

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More information about jobs at the UFZ:

[www.ufz.de/career](http://www.ufz.de/career)

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