



The Federal Institute for Risk Assessment (BfR) has an immediate vacancy in the Department Safety in the Food Chain:

Doctoral candidate student for pharmacokinetic/ toxicokinetic modeling of the transfer of substances in food-producing animals (f/m/d)

Reference number 3617	Pay grade 13 TVöD	Place of work Berlin	Limited for 3 years	Application deadline 09.01.2025	Apply here BfR job portal
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The fixed term is based on the German Academic Fixed-Term Contract Act.

The position is part-time, with 65% of the regular weekly working hours (currently 25.35 hours) and should be used for a doctorate. Participation in the accompanying doctoral program is compulsory. This serves to impart both scientific and methodological knowledge and offers the opportunity to regularly present doctoral projects in internal events and benefit from scientific exchange.

The BfR independently prepares expert opinions and statements on issues of food, feed and chemical safety and consumer health protection in Germany on the basis of internationally recognised scientific evaluation criteria. It advises the Federal Government and other institutions and interest groups in these areas. The BfR thus makes an important contribution to the protection of human health. You can find information on the remit of the Division [here](#) on our homepage.

Im Geschäftsbereich



Tasks:

- Pharmacokinetic / toxicokinetic modeling of the transfer of toxic substances from feed into food of animal origin
You can find examples [here](#) and [here](#)
- Pharmacodynamic / toxicodynamic modeling of (harmful) effects of substances in farm animals.
- Development of biologically-based computer models and simulations for food and feed safety
- Answering questions on bioaccumulation and the effects on livestock of single or multiple chemical contaminants
- Derivation of kinetic properties (e.g. metabolic reaction rates or partition coefficients) of (bio)chemical contaminants using *in vivo*, *in vitro* and *in silico* generated data sets
- Preparation of peer-reviewed publications and scientific project reports
- Communication and presentation of the status of your own scientific studies and the results achieved at national and international congresses

Your profile

- Completed University degree (Master's degree, diploma or comparable university degree) in mathematics, bioinformatics, systems biology, biosystems engineering, biology, chemistry, pharmacy, toxicology, computational science, physics, biophysics or a comparable field
- Knowledge of programming with a focus on numerical mathematics or scientific computing required, preferably in R and Python (Matlab optional)
- Good knowledge of written and spoken English
- Very good IT skills are required, as well as a conscientious approach to work, flexibility, ability to work in a team and resilience

Desired

- Practical experience in the use of programs for pharmacokinetic / toxicokinetic / toxicodynamic modeling (Open Systems Pharmacology, PK-Sim, WinNon-lin, GastroPlus, etc.)
- Knowledge of Bayesian/frequentist statistics, QSAR, machine learning and artificial intelligence
- Good knowledge of written and spoken German
- Experience as a user of high performance computing (HPC) and Linux
- Enthusiasm for interdisciplinary work bridging computation and the natural sciences

What we can offer you

- Trust-based working hours
- 30 days' annual leave (5-day week) plus 24 and 31 December as non-working days
- Additional days-off options via time credits
- Attractive subsidy (50 %) for the company ticket/Deutschlandticket Job
- Possibility of hybrid working (up to 60%)
- Very good connection to the public transport network
- Comprehensive further training opportunities for professional and personal development
- VBL company pension
- Capital accumulation benefits
- Employee welfare (AWO) family service

Application process

Does this position appeal to you?

The please apply by
09.01.2025 via our **online-system**.

Please direct any questions in connection with the application process to
bewerbung@bfr.bund.de.

(Please do not send applications to this e-mail address)

If you are unable to apply online, please send your application by post to:

Bundesinstitut für Risikobewertung
Personalreferat
Max-Dohrn-Str. 8-10
10589 Berlin

Please address any questions about the area of responsibility to:

PD Dr. Pieper: T +49 30 18412-28400
E-Mail: Robert.Pieper@bfr.bund.de

Dr. Numata: T +49 30 18412-28407
E-Mail: Jorge.Numata@bfr.bund.de

You will find more information on our homepage:
bfr.bund.de/de/en/working_at_the_bfr



The BfR welcomes applications from people of all nationalities.



The BfR is an innovative scientific institute offering family-friendly working conditions, for which it was awarded the “audit berufundfamilie®” (work and family) certificate. The BfR guarantees equal career opportunities for women and men. In the case of equal suitability, severely disabled applicants will be given preferential consideration and are only required to have a minimum level of physical suitability.