

PhD Candidate in Eco(toxico)logical Modelling Lab-Field Extrapolation (DC3)

Employment

0.8 - 1.0 FTE

Gross monthly salary

€ 2,541 - € 3,247

Organizational unit

Faculty of Science

Application deadline

30 November 2022

Do you have a recent master's degree in biology or environmental science and want to start your academic career off right? Then help us bridge the gap between toxicity tests in the lab and ecologically relevant endpoints in the field as a PhD candidate. Join an interdisciplinary and intersectoral research and training programme within a network of several European universities and research institutes.

The aim of the EU Marie Curie [QTOX project](#) (seven beneficiaries, ten PhD positions) is to improve chemical risk assessment by bridging the gap between toxicity tests in the lab and ecologically relevant endpoints in the field. In Work Package 5, three PhD positions will relate effects on individuals to impact on populations and communities. The present vacancy (DC3) addresses lab-field extrapolation.

In DC3 you will mechanistically relate lab data to field indicators of biodiversity and bioproductivity widely used in research and management, including mean species abundance, species richness, transfer efficiency and ecological quality classes. Based on previous studies, you will extend population theory to community models. For parameterisation, data will be obtained from databases and the literature. For validation, you will use field and semi-field observations from past studies as well experiments carried out by other PhDs. The project will yield a set of theoretically and empirically underpinned relationships to be used both for fundamental understanding as well as practical risk assessment.

As a PhD candidate you will attend courses, particularly Summer and Winter Schools of ITN-QTOX, improving your research and assessment skills. You will also supervise students and assist in courses at the BSc/MSc level. Your teaching load may be up to 10% of your working time.

Profile

- You hold a recent MSc degree in biology, environmental science or a related discipline.
- You enjoy meaningfully reducing complex systems to simple models.
- You have experience in systematic data collection and analysis as well as in deriving or applying (simple) models. Experimental skills are useful but not required.
- You have a good command of spoken and written English at C1 level.
- You like to work with other people.
- Special requirements: Applicants should comply to the EU rules regarding ITN projects. The most important rules are that applicants should not have a doctoral degree, should have obtained their MSc degree within the last four years and should not have spent more than 12 months of their time during the last three years in the Netherlands. If you do not comply with each of these rules, please do not apply as you will not be considered.

We are

The Radboud Institute for Biological and Environmental Sciences (RIBES) aims to perform world-leading research to understand the response of the natural environment to human impact. RIBES has four focus areas: I. Macronutrients and chemicals of emerging concern, II. Physical conditions: understanding responses and adaptation mechanisms to stressors, III. Biodiversity decline and recovery of ecological communities, and IV. Mitigation of greenhouse gasses. With the knowledge obtained, RIBES wants to contribute to mitigating ecosystem degradation and finding solutions to restore the natural environment. RIBES is nationally and internationally unique as its research encompasses three major groups of organisms (microorganisms, plants and animals) and spans

nearly all levels of biological organisation. The institute is organised in three clusters: Ecology and Physiology, Environmental Science, and Microbiology.

The mission of the [Environmental Science cluster](#) is to provide high-quality scientific knowledge that can help the world move towards greater sustainability. To achieve this, we aim to understand and predict the impact of anthropogenic pressures on ecosystems and humans, using knowledge obtained to identify solutions for a more sustainable society. We develop predictive process-based or statistical models quantifying the impacts of human pressures on the environment and apply these to identify solutions for the environmental sustainability challenges the world faces today.

Radboud University

We want to get the best out of science, others and ourselves. Why? Because this is what the world around us desperately needs. Leading research and education make an indispensable contribution to a healthy, free world with equal opportunities for all. This is what unites the more than 24,000 students and 5,600 employees at Radboud University. And this requires even more talent, collaboration and lifelong learning. You have a part to play!

We offer

- It concerns an employment for 0.8 (5 year contract) - 1.0 FTE (4 year contract).
- The gross starting salary amounts to €2,541 per month based on a 38-hour working week, and will increase to €3,247 from the fourth year onwards ([salary scale P](#)).
- You will receive 8% holiday allowance and 8.3% end-of-year bonus.
- You will be employed for an initial period of 18 months, after which your performance will be evaluated. If the evaluation is positive, the contract will be extended by 2.5 years (4 year contract) or 3.5 years (5 year contract).
- You will be able to use our [Dual Career and Family Care Services](#). Our Dual Career and Family Care Officer can assist you with family-related support, help your partner or spouse prepare for the local

labour market, provide customized support in their search for employment and help your family settle in Nijmegen.

- Working for us means getting extra days off. In case of full-time employment, you can choose [between 29 or 41](#) days of annual leave instead of the legally allotted 20.

Additional employment conditions

Work and science require good employment practices. This is reflected in Radboud University's primary and secondary [employment conditions](#). You can make arrangements for the best possible work-life balance with flexible working hours, various leave arrangements and working from home. You are also able to compose part of your employment conditions yourself, for example, exchange income for extra leave days and receive a reimbursement for your sports subscription. And of course, we offer a good pension plan. You are given plenty of room and responsibility to develop your talents and realise your ambitions. Therefore, we provide various training and development schemes.

Would you like more information?

For questions about the position, please contact Jan Hendriks, Professor at (+31) 6 411 364 70 or jan.hendriks@ru.nl. Alternatively, you can contact Paul van den Brink, Professor at + 31 317 48 16 15 or paul.vandenbrink@wur.nl.

Practical information and applying

You can apply until 30 November 2022, exclusively using the button below. Kindly address your application to Jan Hendriks. Please fill in the [application form](#) and attach the following documents:

- A letter of motivation.
- Your CV.

The first round of online interviews will take place on 15th December. You would preferably begin employment on 1 February 2023. We can imagine you're curious about our [application procedure](#). It offers

a rough outline of what you can expect during the application process, how we handle your personal data and how we deal with internal and external candidates.