

The Faculty of Science and Institute of Environmental Sciences is looking for:

A PhD candidate, Impacts of nanomaterials on microbiome and host interactions Vacancy number: 17-315

Key responsibilities

The Institute of Environmental Sciences (CML) is searching for a PhD-candidate who will be working on the ecotoxicological tools to assist nanosafety assessment. This PhD-project fits within the HORIZON 2020 project "Patrols" aiming to deliver a battery of innovative, next generation physiologically anchored, hazard assessment tools that more accurately **predict** adverse effects caused by **longterm (chronic), low dose exposure to nanomaterials** in human and environmental systems to support regulatory risk decision making.

Key tasks:

- develop a method to determine the sub-lethal responses of a variety of nanomaterials to the microbiome and its host (in this case daphnids and zebrafish larvae)
- obtain mechanistic understanding of the type of effects.
- compare our results with the results obtained by the scientific partners within PATROLS who use 3D gut systems
- extrapolate these results to develop in silico models suited for risk assessment

Selection Criteria

- The candidate should have a Master's degree in Biology or a MSc in environmental chemistry or ecotoxicology or equivalent, and have a strong interest in interdisciplinary work.
- You should have experience in laboratory work, and affinity for working with microbial techniques.
- You must be proficient in spoken and written English, have good communication skills.
- Moreover, you can be a team player as well as work independently and a strong interest in a scientific career.

Research at our faculty

The Faculty of Science is a world-class faculty where staff and students work together in a dynamic international environment. It is a faculty where personal and academic development are top priorities. Our people are driven by curiosity to expand fundamental knowledge and to look beyond the borders of their own discipline; their aim is to benefit science, and to make a contribution to addressing the major societal challenges of the future.

The research carried out at the Faculty of Science is very diverse, ranging from mathematics, information science, astronomy, physics, chemistry and bio-pharmaceutical sciences to biology and environmental sciences. The research activities are organised in eight institutes. These institutes offer

eight bachelor's and twelve master's programmes. The faculty has grown strongly in recent years and now has more than 1,300 staff and almost 4,000 students. We are located at the heart of Leiden's Bio Science Park, one of Europe's biggest science parks, where university and business life come together.

For more information, see <http://www.science.leidenuniv.nl>.

Terms and conditions

We offer a one year term position with the possibility of renewal based on need, funding and performance. Salary range from €2,222 to €2,840 gross per month (pay scale P, in accordance with the Collective Labour Agreement for Dutch Universities).

Leiden University offers an attractive benefits package with additional holiday (8%) and end-of-year bonuses (8.3 %), training and career development and sabbatical leave. Our individual choices model gives you some freedom to assemble your own set of terms and conditions. Candidates from outside the Netherlands may be eligible for a substantial tax break. More at <http://www.workingat.leiden.edu/>.

All our PhD students are embedded in the Leiden University Graduate School of Science www.graduateschools.leidenuniv.nl. Our graduate school offers several PhD training courses at three levels: professional courses, skills training and personal effectiveness. In addition, advanced courses to deepen scientific knowledge are offered by the research school.

Diversity

Leiden University is strongly committed to diversity within its community and especially welcomes applications from members of underrepresented groups.

Information

Enquiries can be made to vijver@cml.leidenuniv.nl.

Applications

To apply for this vacancy, please send no later than 30 August 2017 an email to Susanna van den Oever, sollicitaties@cml.leidenuniv.nl. Please ensure that you upload the following additional documents quoting the vacancy number:

- A CV;
- A Letter of Motivation.