

The Environmental Biogeochemistry and Ecotoxicology, Department F.-A. Forel for Environmental and Aquatic Sciences, at the University of Geneva, Switzerland invites applications for a

PhD position in Environmental Toxicology

for a highly motivated and talented student who is interested in environmental risk of anthropogenic metals.

The environmental impact of manufactured nanomaterials is pertinent in Europe, leading potentially to accumulation of released metallic nanomaterials in environmental compartments, especially the aquatic environment. This research aims to explore a deeper knowledge of the mechanisms governing the biological responses of aquatic invertebrates to metallic nanoparticles exposure under varying freshwater setting and to propose Advance Outcome Pathway for gastropods. For this, the causally connected key events at multiple levels of biological organization including bioaccumulation, oxidative stress, bio-corona formation, protein function and gene modulation will be addressed to link with the adverse outcomes.

This project is a multidisciplinary work covering physico-chemistry, ecotoxicology, ecology and molecular biology. The student will have the outstanding opportunity to learn, develop and apply a range of cutting-edge experimental techniques, *e.g.* field flow fractionation coupled plasma mass spectrometry (AF4-ICP-MS), biophysics, genomic and proteomic analysis.

Requirements: Candidates should hold a Master degree in biology, biochemistry, environmental science, or a related field. The candidate should have a strong interest in the aquatic environment. Previous experiences in cellular biology and molecular techniques or nanotoxicology is an asset. Experimental work with gastropods, or other aquatic organisms handling will definitely be a plus. Excellent knowledge of spoken and written English is essential.

We offer: The university of Geneva is the second largest university in Switzerland and is ranked 59 in the Academic Rankings of World Universities 2020. The position offers i) a multidisciplinary research project in a world-class scientific environment with an outstanding infrastructure. ii) a wide offer of scientific and transferable skill courses at the University of Geneva and neighboring universities.

The successful candidates will prepare a doctorate thesis in the field of environmental sciences, publish scientific articles related to the research project and participate in the teaching of the lab training. This person has the opportunity to supervise master students for the programme of Master in Environmental Science (MUSE). The salary will be in accordance with the Swiss National Science Foundation standards for doctoral students (www.snf.ch).

The position is expected to start on 1st of February 2021 or as soon as possible thereafter. The duration is 4 years.

Application: Please send **in a single PDF file** via email to Dr. Wei LIU (wei.liu@unige.ch)

- CV, and academic transcripts
- cover letter detailing your research interests and experience
- copy of master's thesis
- contact details for 2-3 referees

Deadline: November 30th 2020 or until the position is filled

For further information about the Department F.-A. Forel for Environmental and Aquatic Sciences, Faculty of Science, University of Geneva please visit our website <https://www.unige.ch/forel/fr/>.