Research for the Environment

HELMHOLTZ | CENTRE FOR | ENVIRONMENTAL | RESEARCH – UFZ

The Helmholtz Centre for Environmental Research - UFZ is a research institution within the Helmholtz Association. It provides scientific contributions to the safeguarding of the natural basis of life and of human development potentialities for current and future generations under the challenges of global and climate change. In this way the UFZ contributes towards a sustainable development.

The Department of Isotope Biogeochemistry at the Helmholtz Centre for Environmental Research GmbH - UFZ is offering a position for three years within the European Union 7th framework 'PEOPLE' programme Initial Training Network project 'Isotope forensics meets biogeochemistry – linking sources and sinks of organic contaminants by compound specific isotope investigation' – CSI:ENVIRONMENT – for a

PhD student (f/m) in the field of analytical chemistry (code-digit 54/2011)

for the sub-project: 'Development of LC-IRMS methods for the stable isotope analysis of haloorganic contaminants'

Objectives

The project aims to develop novel applications for the analysis of carbon stable isotope composition of polar organic contaminants (chloro- and bromophenols, chloroacetic acids, herbicides (phenoxyacids e.g. 2,4-D)) using an isotope ratio mass spectrometer linked to liquid chromatography. The different steps of the analytical methods (sample preparation, chromatographic separation and detection) will be optimized, and the possible isotope effects caused during each one of these steps will be investigated. To validate the methods, reference biotic and abiotic degradation experiments (e.g. microbial reductive dechlorination of chlorinated phenols by selected microbial strains) will be used. The developed LC methods will be applied to investigate the carbon isotopic fractionation and (bio)transformation of selected compounds *in situ*. More information on the project can be found at: http://www.csi-environment.ufr.de/

We seek a highly motivated creative person with interests in analytical chemistry (sample preparation, LC method development and mass spectrometry) and biogeochemistry. Candidates should have a master certification in the area of natural sciences, preferentially chemistry or analytical chemistry. Due to the international character of the project, excellent English communication skills are expected. We provide excellent supervision in a young international team.

The place of work is Leipzig, Germany. Salary will be in accordance with Marie Curie rules of the European Commission (http://ec.europa.eu/research/mariecurieactions/careers_en.htm). Please note the mobility restrictions outlined by the EC: Researchers can be of any nationality but at the time of recruitment by the host organisation, researchers must not have resided or carried out their main activity (work, studies, etc) in the country of their host organisation for more than 12 months in the 3 years immediately prior to the reference date.

The UFZ is an equal opportunity employer. Women are explicitly encouraged to apply for increase their share in science and research. Physically handicapped persons will be favoured if they are equally qualified.

Applications are taken until the position is filled. Please send your complete application documents including a CV, motivation letter and copy of certificates under the code digit **54/2011** to the personnel department, P.O. Box 500136, D-04301 Leipzig, Germany or by e-mail to <u>application@ufz.de</u>. Review of the applications will start immediately and will continue until the position is filled.

Earliest start date: as soon as possible

Further Information: Dr. Ivonne Nijenhuis, Tel. ++49-(0)341-235 1356, e-mail: ivonne.nijenhuis@ufz.de Dr. Sara Herrero-Martín, Tel. ++49-(0)341-235-1359, e-mail: sara.herrero-martin@ufz.de www.ufz.de/index.php?en=5265