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The Research Centre for Toxic Compounds in the Environment (RECETOX) is a research and educational facility of the Masaryk University in Brno, Czech Republic. Research of the Centre focuses on environmental fate and effects of toxic compounds, ecological and human risk assessment. RECETOX offers excellent research facilities and inspiring international environment.

RECETOX is currently offering 3 positions of

postdoctoral scientists (f/m)

in the **EU H2020 funded project of Human BioMonitoring for Europe (HBM4EU)**.

The research topics are:

- **Biomonitoring and suspect screening of emerging chemicals in human matrices**
- **Pharmacokinetic modeling of organic contaminants in the human body**
- **Linking exposures and health by Adverse Outcome Pathways**

We are looking for highly motivated and creative researchers with a keen interest in developing a quantitative and process-based understanding of the factors that govern human exposure to different types of chemicals present in indoor environments, food, drinking water etc. and related effects. Candidates should hold a doctoral degree in the area of natural sciences, preferentially environmental chemistry, ecotoxicology or related fields.

The place of work is Brno, Czech Republic. The initial appointment will be made for two years and can be extended to an overall duration of five years. Earliest start date: March 1st, 2017. Salary will be around 2 000 euro. Applications are accepted until the positions are filled. Please send your complete application documents including a CV, motivation letter, 2 recommendation letters and copy of certificates to Veronika Jálová: jalova@recetox.muni.cz.

Masaryk University is an equal opportunity employer. Women are encouraged to apply to increase their share in science. Physically handicapped persons will be favoured if they are equally qualified.

Biomonitoring and suspect screening of emerging chemicals in human matrices

The goal of this project is to provide new data on human exposure of European population to toxic mixtures of chemicals. Samples (blood, urine, and as well as alternative matrices) from the regional population studies (birth cohorts, aging cohorts, cohorts focused on risks and development of cardiometabolic and neurodegenerative diseases) will be assessed. Targeted analytical methods will be combined with suspect screening and non-target approaches to

characterize the complex risks. Data will be further used for pharmacokinetic modeling, assessment of risks and linking exposures to health.

Further Information: Prof. Dr. Jana Klánová, phone: +420-54949-5149; e-mail: klanova@recetox.muni.cz

Pharmacokinetic modeling of organic contaminants in the human body

The project aims to identify and characterize in a comprehensive manner the various types of chemicals that contribute to the exposure of different population groups to anthropogenic chemicals. Experience and skills required for this project include: mass-balance contaminant fate modeling in the environment and/or pharmacokinetic modeling including model development, understanding of physicochemical properties of organic chemicals and how they determine chemical fate, chemical kinetics, model sensitivity and uncertainty analysis and thinking in scenarios, skills in quantitative data analysis and fitting of models to data.

Further Information: Prof. Dr. Martin Scheringer, phone: +420-54949-6698 and +41-44-632-3062; e-mail: scheringer@recetox.muni.cz

Linking exposures and health by Adverse Outcome Pathways

This project will fill in the existing gaps and contribute to the development of Adverse Outcome Pathways (AOPs), i.e. will aim to establish causal links between exposures of humans to organic contaminants (such as emerging priority compounds, flame retardants) with the mechanistic information on their toxicity mechanisms, biomarkers of effect, and ultimately impacts on human health. The project will include both experimental research (mechanistic in vitro toxicology and biomarkers of effects) as well as theoretical synthetic work (development of AOPs by integrating existing information from human cohort studies, literature and databases). The candidate should have understanding and experiences with mode of action MoA toxicology, in vitro and in vivo approaches and/or larger scale studies like human cohorts or population surveys. Candidates should hold a doctoral degree in the area of natural sciences, preferentially environmental health, environmental toxicology and chemistry, biology or related fields.

Further Information: Prof. Dr. Luděk Bláha, phone: +420-54949-3194; e-mail: blaha@recetox.muni.cz