

ABSTRACT OF VACANCY CALL

Post-Doc position in “Recycling of rare earth elements (lanthanides) from electronic waste and water by algae“

PROPOSED STARTING DATE: September 2018.

DESCRIPTION: We are looking for an enthusiastic and motivated individual to join the “Algal metal physiology” research group at the Algatech Centre of Třeboň, Czech Republic for a full-time temporary research position in the frame of Interreg VA project with Austria (“Sustainable biological recycling of ecologically problematic compounds (rare earth elements) from electronic waste and water – REEgain“). The project aims at developing of the overall rare earth recycling technology and water purification preceded by the co-cultivation of various microorganisms (bacteria, algae and cyanobacteria). We expect the candidate to grow algal cultures in the laboratory under defined conditions and different metal content and analyze i) impact on physiology of algae using biochemical methods, ii) bioaccumulation and bioavailability of lanthanides using ICP MS iii) intracellular localization of lanthanides using fluorescence microscopy or μ XRF. The research will be conducted in collaboration with the project partner laboratories of IMC University of Applied Sciences, Donau University and Karl Landsteiner University, Krems, Austria (fermentation, co-cultivation, fractionation, membrane and absorption systems, waste water cleaning, characterization of microorganisms, sequencing, bioinformatics) and prof. H. Küpper, Institute of Plant Molecular Biology (ICP-MS, μ XRF).

RESEARCH AREA: Algal physiology, metal metabolism, recycling, photosynthesis, microbiology.

QUALIFICATIONS AND EXPERIENCE: The candidate is expected to have a PhD in one of the following subjects: Biology, Chemistry, Microbiology, Biophysics and/or related topics.

COMPETENCIES which are desirable or will constitute an advantage during the selection are:

- 1- Basic familiarity with microbiological and biochemical methods;
- 2- Experience in microscopy;
- 3- Practical knowledge of algal culturing.

CONTRACT possible till the end of 2021 (subject to satisfactory progress after initial period) with a monthly remuneration of 35000 CZK (about 1400 €).

DEADLINE FOR APPLICATIONS: August 24, 2018.

ORGANISATION/COMPANY: Institute of Microbiology, Academy of Sciences of the Czech Republic, Department: Center Algatech, Laboratory of Cell Cycles of Algae

WEBSITE: www.alga.cz

COUNTRY: Czech Republic

CITY: Třeboň

SELECTION PROCESS: Interested applicants should send their CV plus motivation letter and two reference letters (or contact to referees), PhD certificate to: vitova@alga.cz

The interviews with the selected candidates will be held in September. The expected start is at the earliest convenience.

ADDITIONAL COMMENTS: The Laboratory of Cell Cycles of Algae at the Institute of Microbiology of the Czech Academy of Sciences in Třeboň is an international, competitive group working on molecular physiology and cell cycle regulation of algae and cyanobacteria. It is part of the Center Algatech which currently employs more than 80 researchers and students in all areas of algal research. The communication language is English. The team collaborates with laboratories in Europe, USA and Japan. We provide a friendly working environment, as well as assistance with the administrative aspects of moving to the Czech Republic and accommodation for the first three months. Třeboň is located in the south of the Czech Republic, close to Austrian and German border, in the center of a UNESCO nature protected Lakeland area. Třeboň and the neighboring town České Budějovice are renowned for their local breweries.