Director of Centre of New Technologies, University of Warsaw, with the Project Leader, announce opening of the competition for the position of PhD Student in the Solar Fuels Laboratory of the Centre of New Technologies, University of Warsaw

**PhD Studentship in Microalgal Bioremediation**
Centre of New Technologies, University of Warsaw

*Characterisation of the molecular mechanisms of heavy metals adaptation in extremophilic red microalgae Cyanidiales*

Applications are invited for a full-time PhD studentship in molecular mechanisms of adaptation of the volcanic microalgae to heavy metals. The position has been funded by the Polish National Science Centre within the OPUS17 call, and is offered in the Solar Fuels Laboratory, Centre of New Technologies, University of Warsaw, Poland.

The main aim of this project is to dissect the molecular mechanisms of cellular adaptation to heavy metals in two model species of extremophilic red microalgae Cyanidiales differing in the cellular ultrastructure and genome composition, especially with regards to genes encoding membrane transporters. The PhD student will examine the ecotoxicological responses of algal cells to heavy metals (through the combination of spectroscopic, microscopic, and quantitative ICP approaches), as well as biochemical and proteomic characterisation of the photosynthetic apparatus and cellular oxidative stress responses following the heavy metal treatment. The ecotoxicological analyses will be performed by the PhD student under the co-supervision of Dr hab. Joanna Kargul (Centre of New Technologies, UW), an expert in microalgal photosynthesis and Prof. Małgorzata Wierzbicka (Faculty of Biology, UW), an expert in plant ecotoxicology.

The applicants should hold an MSc in any subject related to biology, biochemistry or biotechnology. Additional funds are available to attend relevant workshops and international conferences.

**Research field:** life sciences (biochemistry, plant physiology, molecular biology)

**Keywords:** bioremediation, microalgae, photosynthesis, heavy metals, membrane transport, electron microscopy

**Additional Job Details**

**PhD bursary:** 5,000 PLN/month

**Start date:** 8 July 2020 or as soon as possible afterwards

**Duration of PhD Studentship:** until February 2023, with a possibility of extension up to 36 months in total

**Number of positions:** 1
**Working hours per week:** 40 or task-based working hours

PhD candidates should:

- hold an MSc or equivalent in biochemistry, plant sciences, plant physiology, biophysics, or a related field, on the date of commencing work on the project
- be registered as a PhD student at a Polish university, on the date of commencing work on the project
- provide a transcript from the last completed cycle of studies (with a cumulative average grade),
- provide a list of publications and conference abstracts (if applicable)

Previous experience and interest in photosynthetic and/or ecotoxicological research will be a major advantage. A fluent command of spoken and written English is essential. Knowledge of Polish is not a requirement.

Applicants should send a curriculum vitae, including a list of publications, cover letter, and contact details of 2 referees to Dr hab. Joanna Kargul (j.kargul@cent.uw.edu.pl), quoting ‘OPUS17_PhD’ in the subject line. Enquiries related to the position are welcome. The closing date for the receipt of applications is **8 June 2020**. Interviews of shortlisted candidates will be scheduled for the week beginning on **15 June 2020**. Results of the competition will be announced by **24 June 2020**.

To allow us to process your data, please include in your application the signed information on the personal data processing, available at: [http://bsp.adm.uw.edu.pl/bsp/druki-i-formularze/](http://bsp.adm.uw.edu.pl/bsp/druki-i-formularze/)

*The University of Warsaw is committed to equality and diversity, and encourages applications from all sections of the community.*