

Employer: University of National Education Commission, Krakow (UKEN)

Position: Scholarship in National Science Centre OPUS 23 project entitled „Analysis of the photosynthetic apparatus plasticity of the model semi-halophyte *Mesembryanthemum crystallinum* under osmotic stress conditions” (supervisor: Michał Nosek, PhD)

Requirements:

- Master of Science in Biology or Biotechnology;
- confirmed experience in wet laboratory procedures involving basic biochemical and molecular techniques (e.g. isolation and purification of proteins, immunochemical assays, isolation and quality assessment of nucleic acids, analysis of the expression of selected genes);
- confirmed experience in carrying out experiments involving pot cultures in greenhouse conditions;
- basic knowledge of statistical methods used in biology;
- knowledge of basic bioinformatics tools used in plant biology;
- B2 level English proficiency (confirmed by a course grade or an appropriate diploma);

Tasks:

This project aims to explain the reasons behind the high plasticity of the photosynthetic apparatus observed in some plants that undergo facultative CAM photosynthesis during the transition from CAM to C3 photosynthesis. Experimental work within the project will be conducted on *Mesembryanthemum crystallinum* L., a model plant for this variety of CAM photosynthesis. Achieving the project's goals will involve a multifaceted experimental approach. The scholarship recipient's responsibilities will mainly include:

- participating in conducting the experiment, including preparing and maintaining the crops and preparing plant material for experimental work;
- participating in performing gene expression assays;
- participating in biochemical assays;
- participating in performing fluorometric assays;
- participating in data processing and statistical analysis of the results;
- participating in preparing original scientific papers and conference presentations.

Project type: OPUS NZ

Workplace: Institute of Biology and Earth Sciences, UKEN

How to apply: Application in electronic form (single PDF file) should contain:

- A brief (one-page) description of your research interests and previous achievements in the field of plant biology (list of publications and/or scientific presentations);
- A CV;
- A scan of the diploma confirming completion of your master's degree;
- Your master's thesis (in electronic format) for review by the admissions committee;

- A letter of recommendation/recommendation (minimum one, including one from your current master's thesis supervisor).

Application submission: electronically *via* email to the project supervisor:
michal.nosek@uken.krakow.pl

Recruitment's opening: August 1, 2025

Application deadline: August 31, 2025

Recruitment's results: September 10, 2025

Terms of employment:

Recruitment for the project is equivalent to the admission process to the UKEN Doctoral School. The candidate will be required to fulfil the obligations of a doctoral student outlined in the UKEN Doctoral School regulations (more information at: <https://szkola-doktorska.uken.krakow.pl/>).

A doctoral scholarship under the OPUS 23 project (no. 2022/45/B/NZ9/00761) is scheduled for 48 months, starting on October 1, 2025.

Scholarship salary: approximately 5,000 PLN/month before the mid-term evaluation and approx. 6,000 PLN/month after the mid-term evaluation (amounts exempt from income tax, net of social security and health insurance contributions).

The project covers the costs of business travel, conference participation, and project meetings.

A successful recruitment does not involve accommodation for the duration of the scholarship.

Additional information:

Candidates may be asked to participate in an interview with members of the recruiting committee (for international candidates, we offer the option of interviewing via instant messaging, such as Skype).

Please direct questions to the project supervisor: michal.nosek@uken.krakow.pl

Formal requirements and legal information.

https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2022/uchwala27_2022-zal1.pdf

https://www.ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2022/uchwala124_2022-zal1.pdf

IMPORTANT:

The application must include the following statement: "By art. 6 sec. 1 letter a) of the general data protection regulation of 27 April 2016 (OJ EU L 119/1 of 4 May 2016), I consent to the processing of personal data other than those indicated in art. 221 of the Labour Code, first name(s) and last name; parents' names; date of birth; place of residence; correspondence address; education; previous employment, which are included in my job offer for current recruitment."