

Ph.D. student scholarship in the project
“Stimuli-responsive anion transporters for targeted drug delivery”
(OPUS-26, National Science Centre)

Institution: Biological and Chemical Research Centre, University of Warsaw

Principal Investigator: Professor Michał Chmielewski

NCN Project No.: 2023/51/B/ST5/02266

Number of positions: 1

Scholarship duration: 36 months

Start date: October 1, 2026

Project description:

Many therapeutically important drugs exist as negatively charged ions under physiological conditions, which limits their ability to cross cell membranes and reduces their therapeutic efficacy. The aim of this project is to develop a new generation of stimuli-responsive anion transporters capable of facilitating the transport of anionic drugs across lipid bilayers in a controlled manner. The project will focus on the design, synthesis, and characterization of pH-responsive and photo- or enzyme-activated transporters, as well as on investigating their transport mechanisms using model membrane systems. Ultimately, these studies will provide the basis for the development of innovative targeted drug delivery systems with potential applications in cancer therapy and the treatment of bacterial infections.

Requirements:

- Master's degree in chemistry
- Proven track record of research ability, documented by a list of scientific achievements and awards
- Experience in the synthesis, purification, and characterization of organic compounds
- Experience in vesicle preparation and transmembrane transport studies
- Ability to conduct research with minimal supervision and to analyze, interpret, and present research results
- Good communication skills in English

- Reliability, strong organizational skills, and a high level of commitment to achieving the project's research goals

Job Description:

- Synthesis, isolation and characterization of innovative transmembrane transporters,
- Kinetic studies of drug transport across lipid bilayers by the model transporters,
- Literature review, analysis of spectroscopic and structural data, fitting of kinetic data from transport experiments, preparation of manuscripts and reports
- Continuous development of scientific qualifications, experimental skills, and expertise in the research area of the project
- Active participation in research group meetings and collaboration with other members of the project team

Terms of employment:

- Scholarship amount (first 24 months): 3,856.64 PLN / month (net)
- Scholarship amount (subsequent 12 months): 4,881.14 PLN / month (net) – after positive mid-term evaluation
- Total duration of scholarship: 36 months

Required documents:

- Curriculum Vitae (CV)
- Cover letter
- Copy of a Master's degree diploma
- Signed Personal Data Processing Information Clause

Additional information:

The scholarship is awarded in accordance with the rules specified in the "Regulations on awarding scholarships in research projects funded by the National Science Centre", introduced by the Resolution of the NCN Council No. 124/2022 of December 1, 2022.

Application deadline: September 2, 2026

Selection results date: no later than September 9, 2026

Application method: by e-mail to the Principal Investigator: mchmielewski@chem.uw.edu.pl

The Biological and Chemical Research Centre of the University of Warsaw reserves the right to extend the selection deadline, to not select any candidate, and to conduct interviews with shortlisted candidates. Candidates will be informed individually about the interview dates. The results of the recruitment competition will be published on the website of the Biological and Chemical Research Centre of the University of Warsaw.

Information relating to personal data processing

1. Personal Data Controller

Pursuant to Article 13 of the Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation) (hereinafter referred to as “GDPR”), the Controller of your personal data is the University of Warsaw, 26/28 Krakowskie Przedmieście, 00-927 Warsaw.

You may contact the Controller in one of the manners provided at:

<https://www.uw.edu.pl/kontakt/>.

2. Data Protection Officer (DPO)

The Controller has appointed a Data Protection Officer (DPO who may be contacted about matters concerning your personal data via e-mail at: iod@adm.uw.edu.pl. You may contact the DPO in all the matters regarding the processing of your personal data by the University of Warsaw and executing your rights related to personal data processing.

However, the DPO’s duties shall not include other matters, such as current matters related to the concluded contract, receipt of documents related to the performance of the contract, etc.

3. Objectives, legal basis and processing period

Your personal data will be processed for the purposes of:

- conclusion and performance of the scholarship contract – for the term of the agreement (legal basis: Article 6(1)(b) of the GDPR);
- establishment, enforcement or defense of potential contractual claims – for a period of three years from the expiry of the contract (legal basis: Article 6(1)(f) of the GDPR);
- the performance of accounting and tax obligations – for the period of five years from the end of the calendar year (legal basis: Article 6(1)(c) of the GDPR).

For the purpose of performance of the concluded contract, your personal data shall be processed within the scope necessary to perform the concluded contract. All other personal data shall be processed if necessary for the purposes of exercising rights and duties resulting from a legal provision, and/or other applicable regulations.

All your other personal data shall be processed in specific cases after you have given your separate consent to its processing (Article 6(1)(a) of the GDPR), which you have the right to withdraw at any time. Please also be reminded that your withdrawal of consent shall not affect the lawfulness of processing based on your consent before its withdrawal (Article 7(3) of the GDPR).



4. Data recipients

Your personal data may also be shared with parties authorized pursuant to the provisions of law, .e.g. the National Science Center. Access to your personal data shall also be granted to authorized employees of the Controller who must process your personal data as part of their professional tasks and duties.

Other entities that the Controller commissioned to perform certain activities, e.g. providers of services of personal and property protection, postal and courier services, transport services etc., entailing the necessity to process personal data may be data recipients.

You professional data may also be provided to parties to the contracts concluded by the Controller, if it is necessary for the performance of these contracts and results from the contracts concluded.

5. Data transfers outside of the European Economic Area (EEA)

Your personal data may also be processed by Google, our G-Suite for education service provider at their data processing centers.¹

6. Rights of data subjects

According to the principles specified by the GDPR, you have the right to:

- access your data and receive its copy,
- rectify (correct) your personal data;
- restrict personal data processing;
- erase personal data (subject to Article 17(3) of the GDPR);
- object.

You also have the right to lodge a complaint with the President of the Personal Data Protection Office if you believe that the personal data processing violates the law.

7. Information on the data provision requirement

Provision of your personal data within the scope resulting from the legal and other regulations in order to allow the performance of tasks under the contract concluded is necessary to conclude a contract with you. Providing other personal data is voluntary.

I have read and accept the above information:

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(Place and date)

.....

(signature of the candidate)

¹ <https://www.google.com/about/datacenters/locations/index.html>