UNIWERSYTET WARSZAWSKI

Centrum Nauk Biologiczno-Chemicznych Uniwersytetu Warszawskiego

Post-doctoral position available within NCN grant OPUS entitled:

Selective transport of biologically relevant anions through lipid bilayers

Institution: University of Warsaw, Biological and Chemical Research Centre

Project leader: Michał Chmielewski, Ph.D.

Employment conditions: a full-time employment contract for 12 months with the possibility of extension (as a "visiting researcher" without teaching obligations)

Salary: PLN 10000 gross-gross/month (ca. PLN 7715 gross/month)

Suggested starting date: January 2022

Scientific tasks:

The transport of anions across biological membranes is vital for many important life processes. Accordingly, synthetic anion transporters, i.e., molecules capable of catching anions from a solution, transporting them across a biological membrane and releasing them into the solution on the other side, exhibit a wide range of interesting biological activity. In particular, anion transporters may exhibit anti-cancer, antibacterial and antiviral properties, and may also find applications in the treatment of numerous diseases resulting from the dysfunction of natural transporters.

As part of this project, we design, synthesize and study molecules that are capable of selectively transporting anions of biological importance, such as metabolites, drugs or deprotonated amino acids. We are also interested in developing switchable transporters, whose activity could be regulated by pH, light or redox potential. The project is carried out in state-of-the-art research facilities of Supramolecular Chemistry Laboratory located in a new building of Biological and Chemical Research Centre - a part of the Faculty of Chemistry, Warsaw University.

The successful candidates will be responsible for conducting scientific research described in the grant application; in particular for:

- synthesis and characterization of anion receptors and studies of anion transport through lipid bilayers
- cooperation with, supervision and training of PhD students and undergraduate students working in the project
- literature search, designing experiments, verifying scientific hypotheses, preparing data for publication, preparing reports and scientific publications as well as conference presentations.

We offer:

- a full-time employment contract for 12 months with possible extension. Expected starting date: 03/01/2022 (subject to negotiations)
- salary: PLN 10,000 gross-gross/month (*ca.* PLN 7715 gross/month)
- state-of-the-art research facilities in the new building of the Biological and Chemical Research Centre (more information and photos at www.mchmielewski.pl)
- 6-7-person project team consisting of the PI (Michał Chmielewski), 2 post-docs, 2 Ph.D. students and 1-2 graduate students
- possibility to participate in domestic and foreign conferences
- training in the use of modern research devices (e.g., NMR, GC, HPLC, flash chromatograph, microwave reactor, UV-Vis, spectrofluorometer, etc.).

We expect:

- Ph.D. in organic or supramolecular chemistry (at the time of employment)
- scientific experience documented by publications
- extensive experience in the synthesis, purification and characterization of organic compounds
- high motivation for scientific work, resourcefulness, independence, creativity, responsibility, good organization, ability to work in a team
- good command of spoken and written English

The candidate must meet the conditions established by the National Science Centre for post-doctoral researchers. In particular, the person employed in this position must have a doctoral degree obtained not earlier than 7 years before the year of employment in the project. More details and exceptions at: https://ncn.gov.pl/ogloszenia/konkursy/opus16

The competition is open to candidates who meet the conditions set out in Art. 113 of the Act of July 20, 2018 - Law on Higher Education and Science (Journal of Laws of the Republic of Poland 2020, item 85, as amended).

Questions regarding the announcement should be directed to prof. Michał Chmielewski at: mchmielewski@chem.uw.edu.pl.

Work place:

Modern, well-equipped research laboratories in the newly constructed building of the Biological and Chemical Research Centre of the University of Warsaw (part of the Faculty of Chemistry). For more information go to: www.mchmielewski.pl

Requested documents:

- CV with a publication list (please describe your contribution to each publication)
- copies of diplomas (you may include copies of any documents confirming your professional skills, achievements, awards, etc.)
- contact details of two PIs who have agreed to provide references
- consent to the processing of personal data for the purpose of the recruitment - a scan of the signed document "Information on the processing of personal data", available for download from http://bsp.strony.uw.edu.pl/bsp/druki-i-formularze/, tab “Dla kandydata do pracy”, file: Information on personal data processing – document docx.
- the following statement signed by the candidate: „I hereby declare that I have read and accept the rules of conducting competitions for the position of an academic teacher” (available at: https://monitor.uw.edu.pl/Lists/Uchway/Uchwa%C5%82a.aspx?ID=5072

Address for sending application: mchmielewski@chem.uw.edu.pl (entitled: “Application for postdoctoral fellowship-Name of the Candidate).

Deadline for applications: November 15, 2021

Selected candidates will be informed about the date of the interview by e-mail. The interview will take place via the Internet.

The competition will be resolved by November 30, 2021. The results of the competition will be published on the website cnbch.uw.edu.pl no later than 14 days after the competition is resolved.

Prior to the employment, the selected candidates will be obliged to provide the original documents, and in the case of submitting a declaration on the planned date of obtaining a doctoral degree, also a doctoral diploma or a certificate of obtaining a doctoral degree.

The competition is the first stage of the employment procedure as an academic teacher, and its positive outcome is the basis for further proceedings.