UNIWERSYTET WARSZAWSKI

CeNT CENTRUM NOWYCH TECHNOLOGII

CeNT-44-2025

Director of Centre of New Technologies of the University of Warsaw, with the Project Leader, announce opening of the competition for the position of PhD Student in the Biomolecular Machines Laboratory – Centre of New Technologies of the University of Warsaw.

JOB OFFER

Position in the project:	PhD Student
Laboratory:	Biomolecular Machines Laboratory
Scientific discipline:	Chemical sciences (bioorganic chemistry, chemical biology)
Keywords:	antibiotics, membrane-active peptides, antibacterial peptides, conjugation of peptides with enzymes, stapled peptides, hydrogen bond surrogate modifications, Gram-negative bacteria, endolysins,
Job type (employment contract/stipend):	Stipend
Part-time/full-time:	Full time
Number of job offers:	1
Remuneration/stipend amount/month:	5000 PLN (gross gross)
Position starts on:	1 December 2025 or as soon as possible afterwards
Maximum period of contract/stipend agreement:	36 months with possibility of extension
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Dr Monika Wojciechowska
Project title:	Development of new antibacterial agents based on lytic enzymes produced by bacteriophages
NCN programme:	SONATA BIS 13
Project description:	This project proposes to exploit phage endolysins as sources of novel antibacterial agents that interact with membranes. It was planned to 1) combine, by chemical methods, endolysins incapable of passing through the outer membrane of bacteria with peptides that degrade the bacterial wall and 2) use fragments of endolysin sequences that exhibit membrane activity against Gram-negative bacteria to identify new peptides with antibacterial properties. The lab web page is at http://bionano.cent.uw.edu.pl Enquiries about the project: m.wojciechowska@cent.uw.edu.pl
Key responsibilities include:	- synthesis of peptides and peptides with modifications to stabilize their helical structure, - perform the stability assays, CD spectroscopy, and hemolysis experiments, - conjugating peptides with enzymes, - preparing reports and presentations, presenting results at internal and (inter)national meetings.

Profile of candidates/requirements:	The competition is open for persons who meet the conditions specified in the regulations on the allocation of resources for the implementation of tasks financed by the National Science Centre for SONATA BIS 13 grant[1]. In particular: - **MSc degree in chemistry, organic chemistry, biological chemistry, biophysics, biochemistry or related discipline. The MSc degree should be obtained before the date of starting work in the project.** - Confirmed status of a PhD student (on the date of starting work in the project at the latest). - Experience in organic synthesis as well as biochemical and biophysical studies of peptides or proteins will be an additional advantage .
Required documents:	1. Cover letter 2. Current curriculum vitae 3. Copy of MSc certificate (or, if the MSc certificate has not been obtained yet, a certificate/document about the date of MSc defense); 4. Document confirming the status of PhD Student (to be provided before starting work in the project); 5. Signed information on the personal data processing. 6. List of subjects and grades from the first and second cycle of studies and list of publications, conference presentations, and other achievements. Before entering the competition, candidates are obliged to familiarise themselves with Internal Reporting Procedure.
We offer:	- work in a group whose research bridges the fields of chemistry, physics and biological sciences, - friendly work environment and opportunities for scientific development and international collaborations.
Please submit the following documents to:	m.wojciechowska@cent.uw.edu.pl
Application deadline:	31 October 2025
Date of announcing the results:	Not earlier than 15 November 2025
Method of notification about the results:	e-mail, CeNT UW web page

[1] Resolution of the NCN Council No. 50/2023 of May 11, 2023