



CeNT-25-2020

***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 group of researchers 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:	Life sciences (chemistry/biology)
Keywords:	antibiotics, aminoglycosides, antibacterial peptides, stapled peptides, bacteria
Job type (employment contract/stipend):	Scholarship/stipend
Part-time/full-time:	Full-time
Number of job offers:	1
Remuneration/stipend amount/month:	stipend/bursary 5000 PLN/month gross gross (according to the rules of National Science Centre)
Position starts on:	01.10.2020
Maximum period of contract/stipend agreement:	up to 36 months
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Monika Wojciechowska, PhD
Project title:	Conjugates of aminoglycosides with amphipathic peptides as antibacterials
Competition type:	SONATA 15
Financing institution:	National Science Centre (Narodowe Centrum Nauki)
Project description:	The aim of this project is to design and synthesize conjugates of aminoglycoside antibiotics with peptides, as well as determination of their antimicrobial activity. Positively charged antibiotics, such as aminoglycosides, do not easily pass through bacterial membranes. In order to enhance their transport through the bacterial membrane, they will be combined with peptide-like carriers. Conjugation of aminoglycoside antibiotics with peptides that penetrate the bacterial membrane should increase their antibacterial activity. We will also use the stapling technique to stabilize the helical structure of the designed peptides and, in consequence, to improve effectiveness of their penetration through bacterial membranes. This should also improve the effectiveness of aminoglycoside transport to bacterial cells, and as a result their antibacterial activities.
Key responsibilities include:	- syntheses and purifications of peptides and their conjugates with aminoglycosides.



	<ul style="list-style-type: none"><li>- studies of the interactions of peptide-aminoglycoside conjugates with bacterial membranes.</li><li>- performing bacterial growth inhibition and resistance assays.</li><li>- performing and analyzing experiments, writing reports, presenting the results at seminars and conferences.</li></ul>
Profile of candidates/requirements:	<ul style="list-style-type: none"><li>- MSc degree in biology, biotechnology, (bio)chemistry, (bio)physics or related field. The MSc degree should be obtained before the date of employment in the project – by 30.09.2020 at the latest;</li><li>- Confirmed status of a PhD student on the day of starting the work in the project (01.10.2020).</li></ul> <p>To receive the stipend, the successful candidate needs to have a PhD student status at Polish university either in a PhD programme or in a Doctoral School of Exact and Natural Sciences (e.g., at University of Warsaw registration deadline is 28.06.2020, <a href="https://szkolydoktorskie.uw.edu.pl/en/">https://szkolydoktorskie.uw.edu.pl/en/</a>), according to standing procedures;</p> <ul style="list-style-type: none"><li>- Good oral and written command of English;</li><li>- Previous experience in laboratory work would be welcome, although it is not strictly necessary.</li></ul>
Required documents:	<ol style="list-style-type: none"><li>1. Cover letter</li><li>2. CV with the list of scientific activities undertaken to date</li><li>3. Copy of MSc degree (or, if the MSc degree has not been obtained yet, a certificate/document about the date of MSc degree defense);</li><li>4. Contact details of the former supervisor or a recommendation letter</li></ol> <p>Points 1 and 2 should be in English</p>
We offer:	Work in a friendly atmosphere, in a modern and well-equipped institute in an interdisciplinary research group ( <a href="http://bionano.cent.uw.edu.pl">http://bionano.cent.uw.edu.pl</a> )
Please submit the following documents to:	<a href="mailto:m.wojciechowska@cent.uw.edu.pl">m.wojciechowska@cent.uw.edu.pl</a>
Application deadline:	13.06.2020
Date of announcing the results:	19.06.2020
Method of notification about the results:	Top candidates will be invited for a conference call. We reserve the right to contact and reply to only selected candidates. If the top candidate does not meet the formal meet requirements or resigns, we reserve the right to choose the next candidate from the ranking list. Final results will be communicated via e-mail.

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/>