



CeNT-18-2024

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 Laboratory of Chemical Biology Centre of New Technologies of the University of Warsaw.

JOB OFFER

Position in the project:	PhD Student
Laboratory:	Laboratory of Chemical Biology
Scientific discipline:	Chemical sciences (bioorganic chemistry, chemical biology)
Keywords:	Nucleotide, inhibitors, mRNA 5' cap, therapeutic mRNA
Job type (employment contract/stipend):	Stipend
Number of job offers:	1
Remuneration/stipend amount/month:	5000 PLN (gross gross)
Position starts on:	01.10.2024
Maximum period of contract/stipend agreement:	48 months
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Prof. dr hab. Jacek Jemielity
Project title:	<i>Feel the chemistry if you're close enough - proximity-induced SuFEx ligation for mRNA biology and medicine</i>
NCN programme:	OPUS 25
Project description:	The aim of this project is to implement the Sulfur-Fluorine Exchange (SuFEx) reaction into the field of nucleosides, (oligo)nucleotides and mRNA. SuFEx is a novel click-type reaction that takes advantage of exceptional chemical properties of the S(VI)-F bond present in sulfonyl fluorides (R-SO ₂ F), fluorosulfates (RO-SO ₂ F) and sulfamoyl fluorides (RNH-SO ₂ F). Apart from its utility in general organic chemistry SuFEx approach towards biomolecules creates unique opportunity by gaining them new functions and properties through introduction of "sufexable" units into their structure.
Key responsibilities include:	Synthesis and biochemical evaluation of nucleotides and designed mRNA modifications (3' and/or 5' ends). Studies on enzymatic degradation of mRNA and mRNA - protein crosslinking. Post-synthetic modification of (oligo)nucleotides and mRNA
Profile of candidates/requirements:	<ol style="list-style-type: none">1. 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 OPUS 25 grant.2. MSc degree in chemistry, organic chemistry, biological chemistry, biophysics, biochemistry or related discipline. The



	<p>MSc degree should be obtained before the date of employment in the project.</p> <ol style="list-style-type: none">3. Confirmed status of a PhD student (on the date of starting work in the project at the latest).4. Experience in organic synthesis as well as biochemical and biophysical studies of nucleic acids and their components will be an additional advantage
Required documents:	<ol style="list-style-type: none">1. Cover letter2. Current curriculum vitae3. List of publications, conference presentations and other achievements4. List of subjects and grades from the first and second cycle of studies5. Copy of MSc certificate (or, if the MSc certificate has not been obtained yet, a certificate/document about the date of MSc defense);6. Document confirming the status of PhD Student (to be provided before starting work in the project);7. Signed information on the personal data processing.
We offer:	Stimulating and friendly work environment, attractive salary, opportunity to work in an innovative project
Please submit the following documents to:	jjemielity@cent.uw.edu.pl
Application deadline:	31.07.2024
Date of announcing the results:	30.08.2024
Method of notification about the results:	e-mail, CeNT UW web page