



CeNT-03-2025

**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 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:	01.03.2025
Maximum period of contract/stipend agreement:	33 months z możliwością przedłużenia o 3 miesiące
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Prof. dr hab. Jacek Jemielity
Project title:	<i>Plasmonic nanoparticles decorated with fluorescently-labelled mRNA: using single-pair FRET effect for investigating enzymes active in mRNA metabolism</i>
NCN programme:	OPUS 25
Project description:	The aim of this interdisciplinary project is experimental optical detection and quantification of the activity of the enzymes responsible for mRNA degradation using novel double-labelled nucleotide and mRNA-based fluorescent probes. The optical response of those probes can be strongly enhanced if chemically grafted to plasmonically active silver nanowires (NWs). To achieve this, a consortium is established between the Surface Nanoengineering Group at the Institute of Physical Chemistry PAS led by Joanna Niedziółka-Jönsson and the Laboratory of Chemical Biology at the University of Warsaw led by Jacek Jemielity.
Key responsibilities include:	- the synthesis of modified nucleotides for mRNA modification, - mRNA labelling, - spectroscopic characterization of modified nucleotides.
Profile of candidates/requirements:	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"><li>3. Confirmed status of a PhD student (on the date of starting work in the project at the latest).</li><li>4. Experience in organic synthesis as well as biochemical and biophysical studies of nucleic acids and their components will be an additional advantage</li></ol>
Required documents:	<ol style="list-style-type: none"><li>1. Cover letter</li><li>2. Current curriculum vitae</li><li>3. List of publications, conference presentations and other achievements</li><li>4. List of subjects and grades from the first and second cycle of studies</li><li>5. Copy of MSc certificate (or, if the MSc certificate has not been obtained yet, a certificate/document about the date of MSc defense);</li><li>6. Document confirming the status of PhD Student (to be provided before starting work in the project);</li><li>7. Signed <a href="#">information on the personal data processing</a>.</li></ol>
We offer:	Stimulating and friendly work environment, attractive salary, opportunity to work in an innovative project
Please submit the following documents to:	<a href="mailto:j.jemielity@cent.uw.edu.pl">j.jemielity@cent.uw.edu.pl</a> with 'CeNT-03-2025' as the email title
Application deadline:	17.02.2025
Date of announcing the results:	21.02.2025
Method of notification about the results:	e-mail, CeNT UW web page