



CeNT-26-2024

Director of Centre of New Technologies of the University of Warsaw, with the Project Leader, announce opening of the competition for the position of Student in the Laboratory of Chemical and Biological Systems Simulation – Centre of New Technologies of the University of Warsaw.

JOB OFFER

Position in the project:	Student
Laboratory:	Chemical and Biological Systems Simulation Lab
Scientific discipline:	Chemical sciences
Keywords:	Computational chemistry, organic chemistry, catalysis
Job type (employment contract/stipend):	Stipend
Part-time/full-time:	Part-time
Number of job offers:	1
Remuneration/stipend amount/month:	2 000 PLN gross monthly
Position starts on:	1.10.2024 or as soon as possible afterwards
Maximum period of contract/stipend agreement:	1 year (with the possibility of extension by up to 24 month)
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Dr. Pablo Martínez
Project title:	Sustainable Ethenolysis of Renewable Seed Oils with Novel Ruthenium-Based Catalysts
NCN programme:	SONATA-19
Project description:	The ethenolysis of renewable seed oils is a sustainable route to craft high-value chemicals. This technique utilizes biomass, such as plant oils, offering a green alternative to conventional crude oil and petrochemical sources. However, as we make improvements in sustainable ethenolysis to contribute to the global energy transition, challenges emerge, especially in dealing with metathesis reactions to produce fine chemicals from renewable sources. This is where the spotlight turns to the essential need for catalysts that are economical, robust, and recyclable. They are the components that make sure these eco-friendly processes go from ambitious ideas to real-world solutions. The goal of this project is to design new ethenolysis catalysts. The performance of this new class of ethenolysis catalysts will be evaluated by means of computational investigations based on quantum-chemical methods.
Key responsibilities include:	The student will learn and utilize methods of computational chemistry to evaluate catalytic cycles with emphasis on ethenolysis of renewable seed oils catalyzed by ruthenium-based complexes designed <i>in silico</i> .



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 SONATA 19 grant.(2) Enrollment as a student of first cycle studies, second cycle studies or uniform Master's studies conducted in a higher education institution on the territory of Poland, in chemistry, physics, biology or related discipline (on the date of starting on the project tasks realization).(3) The student should possess:<ul style="list-style-type: none">- Basic knowledge of organic chemistry and catalysis.- Proficient command of English.- Interest in working extensively with computational tools and software.
Required documents:	<ol style="list-style-type: none">1. Cover letter (max. 2 pages)2. Current curriculum vitae (max. 1 page)3. Copy of document confirming the student status (on the date of starting on the project tasks realization)4. Signed information on the personal data processing
We offer:	We offer the opportunity to work on an innovative project focused on the development of green chemistry, within a stimulating and friendly work environment. The student will receive training in state-of-the-art computational chemistry, with the aim of contributing to research that will be published in internationally recognized scientific journals.
Please submit the following documents to:	p.martinez@cent.uw.edu.pl) with the reference number CeNT-26-2024 in the subject of the e-mail
Application deadline:	20.09.2024
Date of announcing the results:	30.09.2024
Method of notification about the results:	e-mail, CeNT website