



UNIwersytet  
Warszawski

Wydział Chemii



## Job offer: Student – scholarship holder

in the POLONEZ BIS project financed by



and entitled

*“Unraveling and optimizing the photoisomerization dynamics of light-driven molecular rotary motors, LightDynaMo”.*

Project contract number: DEC-2022/47/P/ST4/01418.

Project leader: Dr. Davide Accomasso.

### Research field:

Quantum chemistry, Computational chemistry.

### Requirements:

- status of a student of full-time or part-time second-cycle studies at universities in the territory of the Republic of Poland (at the time of starting work in the project),
- or the status of a student of at least the fourth year of full-time or part-time uniform master's studies conducted at universities in the territory of the Republic of Poland (at the time of starting work in the project),
- bachelor's degree in chemistry or physics (or related sciences),
- knowledge of the basics of quantum chemistry and molecular dynamics,
- good knowledge of English,
- strong motivation for scientific work and the desire to acquire new knowledge and skills.

### Description of tasks:

The aim of the project is to perform a computational investigation on the photoisomerization reactions of light-driven molecular rotary motors, which are molecules capable of converting light and heat into unidirectional rotational motion. The student will carry out nonadiabatic excited-state dynamics simulations, using the trajectory surface hopping method, for a selected molecular rotary motor, both in the gas phase and in solution. In the latter case, a quantum mechanics/molecular mechanics (QM/MM) scheme will be employed. The main goal of the student's work will be to achieve a detailed understanding of the photoisomerization dynamics in the investigated molecule, as well as to interpret the reported experimental observations. The results of the simulations will

contribute to the development of general rules connecting the chemical structure of a motor with its photochemical behaviour.

**Conditions of employment:**

- the place where research tasks will be carried out is the Faculty of Chemistry of the University of Warsaw,
- research scholarship of 1500 PLN (per month) payable for a period of 3 months (with a possible extension up to 6 months),
- possible financing of participation in a national or international scientific conference.

**Required documents:**

- cover letter (describing scientific interests and previously conducted research),
- curriculum vitae (CV),
- copy of the diploma of completion of the first-cycle studies (or other document confirming their completion),
- list of grades from the first-cycle studies,
- consent to the processing of personal data (according to the template attached to this document, see below).

**Deadline for receiving applications** via e-mail: May 26, 2024.

All interested candidates should send their application to the following e-mail address: [d.accomasso@chem.uw.edu.pl](mailto:d.accomasso@chem.uw.edu.pl) (topic: student scholarship opening).

**Deadline for the competition results:** May 29, 2024.

**Desired start date** of the scholarship: June 1, 2024.

**Contact:** Dr. Davide Accomasso, University of Warsaw, Faculty of Chemistry (room. 517),  
ul. Pasteura 1, 02-093 Warszawa, E-mail: [d.accomasso@chem.uw.edu.pl](mailto:d.accomasso@chem.uw.edu.pl)

DECLARATION OF CONSENT TO PROCESSING PERSONAL DATA

I consent to the processing of my personal data by the University of Warsaw, based at ul. Krakowskie Przedmieście 26/28, 00-927 Warszawa, in order to conduct the recruitment process and select the scholarship holder and conclude a scholarship agreement with the University of Warsaw. I have been informed about my rights and obligations.

I declare that providing my personal data is voluntary.

.....

(place and date)

.....

(signature of the person applying for the scholarship)

Information on the processing of personal data at the University of Warsaw is available at:

<https://www.uw.edu.pl/ogolne-rozporzadzenie-o-ochronie-danych-rod-na-uw/>