Project title: Advancing molecular collision studies to the limits of first-principles quantum calculations and accurate spectroscopy; novel approaches for providing reference spectroscopic data for studying planetary atmospheres / Rozwój badań nad zderzeniami molekularnymi do granic metod obliczeniowych fizyki kwantowej i ultradokładnej spektroskopii laserowej; nowe podejście do generowania referencyjnych danych spektroskopowych dla badań atmosfer planet.

Position: Student- Scholarship

Number of positions: 1
City: Toruń
Website: https://www.fizyka.umk.pl

Nazwa jednostki:
Instytut Fizyki, Uniwersytet Mikołaja Kopernika w Toruniu

Requirements:
Skills and experience in experimental molecular and optical physics. Good knowledge of LabView and Mathematica software. Excellent problem-solving and communication skills. Written and verbal communication skills and presentation skills. Teamwork ability. Good command of the English language.

Description of duties: Research tasks will be carried out as part of the NCN Sonata Bis 12 “Advancing molecular collision studies to the limits of first-principles quantum calculations and accurate spectroscopy; novel approaches for providing reference spectroscopic data for studying planetary atmospheres.”

Task: Construction and testing of the optical cavity /Budowa i testy wnęki optycznej.

Competition type: Sonata Bis 12

Field of science: ST

Application deadline: 05.11.2026

Application form: e-mail

Employment conditions:

Scholarship duration: for 6 months 01.12.2026 – 31.05.2027
Amount: 1.800 PLN/month

Additional information:

The scholarship is awarded in accordance with the rules contained in the Regulations for granting research scholarships of the National Science Center introduced by the resolution of the Council of the National Science Center No. 25/2019 of 14 March 2019.

Required documents (send to karolina.kitkowska@umk.pl with annotation “Sonata Bis 12.12.3”):
1. Application
2. CV
3. Copy of scan of language certificate (if any),
4. Copy or scan of candidate’s publications (if any),
5. Consent to the processing of personal data (Appendix 1 https://www.fizyka.umk.pl/panel/wp-content/uploads/Zalacznik-bez-tytulu-00016.pdf).
6. Declaration of student status

All documents should contain the candidate's signature or its scan.

Language of application: Polish or English.

Selected candidates will be notified individually about the date of a possible interview.

In the event of resignation of the selected candidate, the right to indicate the next candidate from the ranking list is reserved.