Tytuł projektu:

Spectroscopy of quantum systems by means of exact and fast localization of optical cavity resonances

Nazwa stanowiska:

Doktorant-stypendysta

Liczba stanowisk: 1

Miasto: Toruń

Link do strony www jednostki: https://www.fizyka.umk.pl

Wymagania:

- MSc in physics, chemistry or related field.
- According to the NCN requirements, the candidate has to be a PhD student.
- Good knowledge of optics, spectroscopy, atomic and molecular physics.
- Experience in numerical and computational methods (knowledge of software such as Labview, Mathematica, Fortran, C++ is welcome).
- Experience in laboratory work, especially in construction of optical systems, is welcome.
- Great commitment to work.
- Analytic skills and problem-solving skills.
- Curiosity and motivation to state scientific questions. Scientific creativity.
- Math skills and proficiency in calculations.
- Written and verbal communication skills as well as presentation skills.
- Teamwork ability.
- Good command of English.

Opis zadań:

Research tasks will be carried out as part of the NCN Opus 20 project “Spectroscopy of quantum systems by means of exact and fast localization of optical cavity resonances”.

Tasks:

- High-accuracy spectroscopy of molecular spectral line shapes
- Development of software for acquisition and analysis of spectroscopic data
- Analysis of the impact of detection system transfer functions on spectral measurement accuracy

Typ konkursu: Opus

Grupa nauk: ST

Termin składania ofert: 29.01.2026, 23:59

Forma składania ofert: e-mail

Warunki zatrudnienia:

Scholarship duration: 8 months.

Amount: 5000 PLN (brutto brutto) / month

Additional funds are allocated to cover participation in international conferences.

Dodatkowe informacje:

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 PI of the project Agata Cygan, agata@fizyka.umk.pl):

- Cover letter
- CV
- Copies of obtained diplomas and certificates
- Copy or scan of candidate's publications (if any)
- Information about scientific awards, scholarships and other distinctions (if any)
- Description of current research activity (if applicable)
- Consent to the processing of personal data (https://www.fizyka.umk.pl/panel/wp-content/uploads/Zalacznik-bez-tytulu-00016.pdf).

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.