

NCN research scholarship competition for PhD students
at the **Institute of Theoretical Physics**
Wrocław University of Science and Technology (Wrocław Tech)

Reference number: I02W11D11/19/2025

The field of exact and natural sciences

Scientific discipline: Physical Sciences

Type of contract: scholarship

Type of offer: competition

Job description:

Scholarship for a doctoral student carrying out tasks in the project *Quantum acousto-optics of hybrid nanosystems*, NCN Maestro, 2023/50/A/ST3/00511, at the Institute of Theoretical Physics of the Wrocław University of Science and Technology.

Tasks:

- Modeling of the properties of light emitted by acoustically modulated solid-state quantum emitters and acoustic and optoacoustic control of the charge and spin states of quantum emitters. Participation in research planning, contribution to building models, performing calculations and simulations, interpreting results, writing articles.

Requirements:

- master's degree or master's degree in engineering in the discipline of physical sciences (candidates who obtain and deliver a diploma by September 19, 2025 are eligible);
- knowledge of theoretical physics at the level of master studies;
- experience in the field of theoretical solid state physics or quantum optics;
- good knowledge of English;
- Enrollment to the Doctoral School of Wrocław Tech by the date of commencement of work on the project.

Required documents:

- application for the competition, indicating the reference number and e-mail address of the candidate.
- Description of competences and scientific achievements (in the form of one PDF file) including:
 - Description of scientific achievements with an indication of the candidate's role according to <https://credit.niso.org/>,
 - Information about scientific experience gained in the home country and abroad, training and scientific workshops completed, participation in scientific projects,
 - Information about received awards and scholarships,
 - Information about documented competences in accordance with the description of tasks and requirements.
- A scan of the master diploma or a certificate from the university stating the expected date of obtaining the diploma.

- declaration of having read the information regarding the processing of personal data (“RODO”, see: <https://wppt.pwr.edu.pl/pracownicy/nabory>)

We offer:

- The possibility of carrying out research work as part of an interesting scientific project.
- Doctoral School scholarship: PLN 4400 gross (approx. PLN 3900 net) for the 1st and 2nd years, PLN 5490 gross (approx. PLN 4870 net) for the 3rd and 4th years.
- Additional project scholarship: PLN 3000 (net) for 3 years with the possibility of extension.

Deadline for submitting offers: 19.05.2025

Planned start date of the tasks: 1.10.2025

Additional information:

The scholarship is awarded in accordance with the Regulations for awarding NCN research scholarships in research projects financed by the National Science Center (NCN) introduced by the Resolution of the NCN Council No. 124/2022 of December 1, 2022.

Receiving the scholarship is conditioned upon enrollment to the Doctoral School at Wrocław Tech, to which the candidate must be admitted in accordance with the applicable rules. See: <https://szd.pwr.edu.pl/en/for-candidates/admission-procedure>, deadline for applications to the Doctoral School: June 3.

Submitting documents only electronically to an e-mail address Pawel.Machnikowski@pwr.edu.pl.

All correspondence related to the competition will be sent electronically to the e-mail address provided in the application.

Additional information is provided by the project manager, prof. Paweł Machnikowski: Pawel.Machnikowski@pwr.edu.pl.

Please indicate the competition reference number in the subject of the message. Applications from persons sending their documents without indicating a specific reference number and those sent after the deadline for submitting offers will not be considered.

The university reserves the right to reject the competition without giving any reasons.