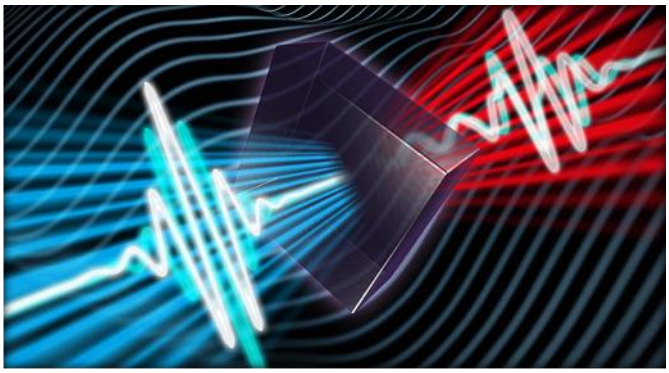
Student (master) scholarship in the FIRST TEAM FENG FNP project

From academic year 2025/2026 (start: 01.04.2026)



Position type:	Scholar - student
Number of positions	1
Scientific discipline:	Automatics, Electronics, Electrical engineering and Space Technologies
Type of renumeration:	Scholarship
Renumeration:	2000 PLN / month
Position starts on:	1st April 2026
Period of contract:	01.04.2026 – 30.09.2026 (with possible extension for another 6 months)
Institution:	Wrocław University of Science and Technology; Faculty of Electronics, Photonics and Microsystems (W12); Department of Field Theory, Electronic Circuits and Optoelectronics (K35) Laser & Fiber Electronics Group
Principle investigator	Dr Maciej Kowalczyk
Title of the project:	Ultrastable pulsed lasers covering the spectral range from near to far infrared (Ultrastabilne lasery impulsowe pokrywające zakres spektralny od bliskiej do dalekiej podczerwieni)
Description of the project:	The project covers the fields of photonics and electronics: in particular, lasers generating ultrashort pulses and the conversion of their radiation through non-linear optics processes. Within the project we will develop novel stabilised laser sources generating ultra-short pulses in the mid-infrared (3-25 µm) and far-infrared (25-300 µm) spectral range. These sources will be based on chromium solid-state lasers (Cr:ZnS/Se), and the duration of the pulses generated will reach single oscillations of the electric field (sub-10 fs). These pulses will then be converted to the mid-infrared band using non-linear optics techniques [Nature Photonics 16, 512 (2022)]. The main objective of the project is to develop an ultra-broadband pulsed laser source that will cover the entire bandwidth from near to far infrared (1-300 µm). More details about our research can be found at: **https://umir.pwr.edu.pl/** The project is co-funded by the European Funds for Smart Economy 2021-2027 (Priority 2) within the FIRST TEAM FENG programme.
Main tasks:	1. Construction of optoelectronic systems and their automation for a mid- and far-infrared radiation source demonstrator

Profile of candidates (requirements):	1. Offer for undergraduate students (master), electronics and physics students preferred 2. Knowledge in electronics and programming 3. Required English language skills at minimum B2 level 4. Enthusiasm, strong motivation for experimental research and patience. 5. Availability in summer break period
Required documents	1. Curriculum vitae (CV) including major achievements and scientific publications, awards, scientific activity. Please highlight your competencies in terms of the tasks performed in the project.
We offer:	• Scholarship • Participation in conferences and summer schools • Participation in a very attractive scientific program focused on fundamental research, • Work in a recognized team of researchers, • Access to unique top-level equipment, • Dissemination of your results in scientific journals
Recruitment procedure:	The recruitment committee, consisting of the principal investigator of the project and at least one employee of Wrocław University of Science and Technology who is an expert in the given scientific discipline, will examine the candidates taking into account: a) Competences of the candidates, i.e., experience in similar projects, knowledge in fiber optics and laser technology b) Research achievements of the candidates (grades obtained during studies, publications, research activities) c) Awards and prizes obtained by the candidates Candidates will be informed via e-mail about the results of the competition.
E-mail for sending applications and inquiries:	maciej.kowalczyk@pwr.edu.pl
Application deadline:	**23.03.2026**
Interviews deadline:	**30.03.2026**

Please include in your application:

“I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended.”

Fundusze Europejskie dla Nowoczesnej Gospodarki | Rzeczpospolita Polska | Dofinansowane przez Unię Europejską | FNP Fundacja na rzecz Nauki Polskiej