Changing the present to make a difference in the future

— Mission of AMU —

We create a working environment supporting both male and female scientists

— HR Excellence in Research —

VICE-RECTOR

for Human Resources and Doctoral Schools

at the Adam Mickiewicz University, Poznan

announces a competition for the position of:

Scholarship grantee/Student

in the NCN SONATA:

Time and Momentum-resolved Studies of Gigahertz Acoustic Phonons in Acoustoplasmonic Metamaterials

at the Faculty of Physics and Astronomy

Basic information

1. Competition reference number	UMO-2021/43/D/ST3/02526_Konkurs
2. Research discipline	Physics
3. Number of work hours per week	Part-time, 16 hours (2 days) per week in a task-based work time system.
4. Monthly salary	
a. Basic salary	1500 PLN/month
b. Other remuneration components	AMU Remuneration Regulations
5. Type of an employment contract and expected duration of employment	Fixed-term contract for 6 months.
6. Anticipated job starting date	**15th of April, 15.04.2026**
7. Workplace location	Faculty of Physics and Astronomy, Collegium Physicum
8. Work rules	AMU Work Regulations
9. Application deadline and process	Electronic submission to thomas.vasileiadis@amu.edu.pl.

	Application deadline: 06.04.2026.
10. Required documents	■ **Submission of the candidate's application to the call** (email with the project number in the subject line: UMO-2021/43/D/ST3/02526_Konkurs. ■ **Curriculum Vitae** including information on scientific achievements (max. 3 A4 pages). ■ Diplomas or certificates issued by colleges and universities attesting to education and degrees or titles held (in case of academic degrees obtained abroad - the documents must meet the equivalence criteria set out in Article 328 of the Act of 20 July 2018 Law on Higher Education and Science (Journal of Laws of 2023, item 742 Polish: Dziennik Ustaw 2024 poz. 1571 t.j.). ■ **Two letters of support.** ■ **The email body must include consent to the processing of personal data as follows:** In accordance with Article 6 (1) (a) of the General Data Protection Regulation of 27 April 2016. (OJ EU L 119/1 of 4 May 2016) I consent to the processing of personal data other than: first name, (first names) and surname; parents' first names; date of birth; place of residence (mailing address); education; previous employment history, included in my job offer for the purpose of the current recruitment."

Conditions of the competition determined by the competition committee

I. Determination of qualifications according to the Euraxess guidelines	☒ **R1** First Stage Researcher (Individuals doing research under supervision in industry, research institutes or universities who have not yet obtained a PhD degree)
II. Job offer description	The job offer refers to the position in the NCN SONATA project (National Science Center) titled Time and momentum-resolved studies of gigahertz acoustic phonons in acoustoplasmonic metamaterials (Contract number: UMO-2021/43/D/ST3/02526). The artificial, nano-engineered materials that synergistically merge plasmons and acoustic phonons are termed acoustoplasmonic metamaterials. On the one hand, plasmons offer enhanced light–matter interactions and high sensitivity of light-based probes to mechanical deformations. On the other hand, acoustic phonons operating in the gigahertz (GHz) frequency range can be used to modulate optical

	beams or to mediate signal processing with microwave radiation. To harness these phenomena for devices such as optomechanical modulators, transducers, and resonators, it is necessary to understand how laser pulses and optical beams can excite and detect GHz acoustic phonons, the degree of coherence of these phonons, their lifetime, and their interactions with other microscopic excitations such as electron-hole pairs. This task can be accomplished by combining Brillouin Light Scattering (BLS) with femtosecond laser excitation and time-correlated single-photon counting modules (TCSPCM). In this project, the student will work towards the preparation of a Master's thesis on the topic "Time- and frequency-resolved detection of coherent acoustic phonons in the gigahertz frequency range," and will perform basic characterization of submicron-thick semiconducting membranes using spontaneous, momentum-resolved BLS, pump-BLS measurements using femtosecond laser excitation, and time-resolved measurements with a TCSPCM device. Moreover, they will contribute to the development of theoretical and computational models to analyze and interpret the obtained results. The student's tasks will include day-to-day laboratory work, maintaining a lab book, keeping detailed notes, participating in scientific discussions and meetings, and preparing figures.
III. Requirements and qualifications	Bachelor of Science in Physics or related topics such as Materials Science, Physical Chemistry, or Electrical Engineering. Having the status of master student in the Adam Mickiewicz University. Basic knowledge of condensed matter physics and optics. Demonstrated experience with any of the following tools: Python, Mathematica or Matlab, Origin and LabView. Ability to integrate a PC with various hardware components and sensors.
IV. Required languages	English – fluent or native
V. Required research experience	**1.** Basic experience in optics, lasers, spectroscopic or time-domain techniques and building optical systems. **2.** Ability to perform supervised work in a team. **3.** Knowledge of English language. **4.** Basic knowledge of software such as: Mathematica or Matlab, Python, LabView, OriginLab, CorelDraw, LaTex or similar tools, and willingness to learn Comsol Multiphysics. **5.** Basic knowledge of condensed matter physics and optics, electromagnetism, statistical physics and thermodynamics.

VI. Benefits	■ supporting employees with disabilities ■ flexible working hours ■ funding for language learning ■ co-financing of training and courses ■ pension plan ■ savings and investment fund ■ preferential loans ■ additional social benefits ■ leisure-time funding ■ subsidizing children's vacations ■ "13th" salary ■ healthcare package
VII. Eligibility criteria	1. Compatibility of the candidate's scientific profile with the advertisement (40/100 points). 2. Number, scientific level and thematic compatibility of the candidate's scientific publications and presentations (40/100 points). 3. Assessment on the Bachelor's diploma and Master's coursework grades (10/100 points). 4. Internships and participation in research projects (10/100 points).
VIII. The selection process	1. Competition committee begins working no later than 14 days after the deadline for submission of documents. 2. Formal evaluation of submitted proposals. 3. Call to provide additional or missing documents if necessary. 4. Selection of candidates for the interview stage (score above 75/100 points). 5. Interviews for candidates who meet the formal requirements and have at least 75/100 points. 6. The chair of the competition committee announces the results and informs the candidates. This information will include a justification referencing the candidates' strengths and weaknesses. **NOTE:** Applications must include the reference number in the email subject line and consent to the processing of personal data in the email body. Applications that do not meet these requirements will not be considered.
IX. Prospects for professional development	1. Supervision in building a scientific profile through publications in high-impact scientific journals, 2. Preparation for continuation of studies toward a PhD, 3. Establishing cooperation with renowned research centers in the world.

RODO Information Clause

Pursuant to Article 13 of the General Data Protection Regulation of 27 April 2016. (Official Journal of the EU L 119 of 04.05.2016) we inform that:

1. The controller of your personal data is Adam Mickiewicz University, Poznań with the official seat: ul. Henryka Wieniawskiego 1, 61 - 712 Poznań.
2. The personal data controller has appointed a Data Protection Officer overseeing the correctness of the processing of personal data, who can be contacted via e-mail: iod@amu.edu.pl.
3. The purpose of processing your personal data is to carry out the recruitment process for the indicated job position.
4. The legal basis for the processing of your personal data is Article 6(1)(a) of the General Data Protection Regulation of 27 April 2016 and the Labour Code of 26 June 1974. (Journal of Laws of 1998 N21, item 94 as amended).
5. Your personal data will be stored for a period of 6 months from the end of the recruitment process.
6. Your personal data will not be made available to other entities, with the exception of entities authorized by law. Access to your data will be given to persons authorized by the Controller to process them in the performance of their duties.
7. You have the right to access your data and, subject to the law, the right to rectification, erasure, restriction of processing, the right to data portability, the right to object to processing, the right to withdraw consent at any time.
8. You have the right to lodge a complaint to the supervisory authority - the Chairman of the Office for Personal Data Protection, ul.Stawki 2, 00 - 193 Warsaw.
9. Providing personal data is mandatory under the law, otherwise it is voluntary.
10. Your personal data will not be processed by automated means and will not be subject to profiling.

Procedure for reporting violations of the law

Recruitment: Positions and Competitions for Academic Teachers: Information on the internal reporting procedure referred to in the Act of 14 June 2024 on the Protection of Whistleblowers (Journal of Laws, item 928), announced by Regulation No. 5/2023/2024 of the Rector of Adam Mickiewicz University, Poznań of 17 September 2024 concerning the introduction of the Internal Reporting Regulations regarding the breach of law and follow-up actions at Adam Mickiewicz University, Poznań. Below are links to the regulation together with its annexes:

Ordinance No. 5/2023/2024
Rules for submissions
Information clause