

COMPETITION ANNOUNCEMENT

The Dean of the Faculty of Physics, with the consent of the Rector of the University of Warsaw, announces a competition for the position of assistant professor (postdoc) ¹ in the project First Team FENG.

About the programme/project/undertaking:

Title of project	Ultracold Polar Molecules for Quantum Technologies Project no. FENG.02.02-IP.05-0059/24
Type of project	First Team FENG
Funding institution	Foundation for Polish Science
Duration of project	1.10.2025-30.09.2029
Main Contractor of project	Prof. dr hab. Michał Tomza
Description of project	The aim of the project is to develop and optimize an innovative method for utilizing new ultracold, strongly polar, and strongly polar and magnetic molecules in optical tweezers and lattices to realize a new generation of ultracold molecular qubits and two-qubit quantum gates. In the first stage, we will thoroughly investigate the structure and quantum control capabilities of the proposed strongly polar molecules. Next, we will develop an optimal method for encoding qubit states on the most promising molecules. In the second stage, we will focus on designing optimal two-qubit gates based on strong dipole interactions and the control of molecules with optical tweezers. Finally, the proposed molecular quantum computer architecture will be investigated for its use in real-world quantum computing and other applications, such as quantum simulations and precise quantum measurements. The main contractor is Prof. dr hab. Michał Tomza.

Position details:

Position title	Assistant professor
Organisational unit	Faculty of Physics
Employment group	Research
Position profile ²	R2
Academic discipline ³	Physical Sciences
Number of positions	1
Form of employment and length of working time (proportionally to full-time employment)	Employment contract, 24 months of full-time employment

¹ The nouns used in the announcement apply to people of all genders.

² Complete only in the case of competition for the position in the research employment group or the research and teaching employment group.

³ Complete only in the case of competition for the position in the research employment group or the research and teaching employment group.

Expected date of commencement of work and employment period	1.07.2026 or later
Remuneration	Basic remuneration PLN 7045 gross/month plus the additional annual remuneration, allowance for years of service, additional salary PLN 7200 gross/month. More information: link
Other working conditions	<ul style="list-style-type: none"> – <i>Workplace: Faculty of Physics UW, Pasteura 7, 02-093 Warsaw</i> – <i>Career opportunities: ...</i> More information: link
Basic responsibilities and obligations	<ul style="list-style-type: none"> – Conducting research in the field of theoretical calculations of electronic and rovibrational structure of molecules with large dipole moments. – Writing the necessary computer codes. – Deriving the necessary equations. – Writing reports and manuscripts. – Supervising the work of graduate/PhD students. – Participating in scientific conferences and symposia. <p><i>More information: Scope of responsibilities of the academic teacher</i></p>
Conditions for entering the competition ⁴	<ul style="list-style-type: none"> – <i>Fulfilment of the requirements set out in Article 113 of the Law on Higher Education and Science (Journal of Laws of 2024, item 1571, consolidated text)</i> – Holding a doctoral degree in physics or related sciences obtained from an entity other than the entity where employment for this position is planned; the PhD should be obtained before starting employment – Significant scientific achievements – Preparing a plan for further research activities – International experience.
In addition, we expect ⁵	<ul style="list-style-type: none"> – Knowledge of theoretical methods for performing advanced calculations of the electronic structure of molecules – Motivation and independence in solving scientific problems. <p><i>If hired, we expect the University of Warsaw to be the primary workplace for the successful candidate.</i></p>
Criteria for the assessment of candidates in a competition	<ul style="list-style-type: none"> – Assessment of scientific preparation relevant to the position – Assessment of scientific experience (conferences, presentations, collaborations etc.). – Interest in the subject and motivation for research. – Knowledge of electronic structure theory methods, including quantum-chemical packages for relativistic and excited-state calculations – Experience in programming.

Position not related⁶ to activities covered by the protection of minors.

Competition rules:

Announcement reference number	WF-1210-7/2026
Keywords	ultracold particles, dipole interactions, molecular qubits, quantum gates, quantum computing, quantum simulations, optical tweezers
Deadline for submitting applications ⁷	30.04.2026

⁴ Required by the Act, the Law on Higher Education and Science, the Statute of the University of Warsaw, as well as necessary for the position.

⁵ Additional conditions to be met; however, not meeting them will not lead to a negative formal assessment.

⁶ Delete as appropriate.

⁷ Not sooner than 30 days from the date of publication of the announcement.



Method of submitting an application	– Email to marzena.niedzwiadek@fuw.edu.pl
Required documents	<ul style="list-style-type: none"> – Candidate's questionnaire: link – Copy of doctoral diploma or confirmation of obtaining a doctoral degree.. – If applicable — information on the planned date of obtaining the doctoral degree (the doctoral degree is required prior to submitting documents for employment) – List of publications, indicating the achievements the author considers most important. – List of at least two independent researchers who may be asked by the Chair of the Recruitment Committee to provide feedback on the candidate's research (and possibly teaching or organizational) activities. – Copies of other documents confirming the candidate's qualifications. <p>Please ensure that your application is complete and submitted by the deadline indicated!</p>
The competition is the first stage of the recruitment process, please read the Policy of Open, Transparent and Merit-Based Recruitment at the University of Warsaw link	
Stages of competition	<p>The competition consists of the following stages:</p> <ul style="list-style-type: none"> – Stage I - formal evaluation of documents, – Stage II - substantive evaluation on the basis of submitted documents, – Stage III - interview with selected candidates , – Stage IV - final evaluation of competence, experience and scientific achievements, – Stage V - adjudication of the competition and announcement of results.
Anticipated date and method of notification of the competition outcomes	<i>10.06.2026 by email</i>
Contact for any questions relating to the competition	<p>Email to marzena.niedzwiadek@fuw.edu.pl with the announcement reference number</p> <p>Accessibility needs should be indicated on the Candidate's Questionnaire, in: <i>Other relevant information from a candidate</i></p>

Employing faculty/unit:

Research profile of faculty /unit	https://www.fuw.edu.pl/directions-of-research.html
Teaching profile of faculty/ unit	https://www.fuw.edu.pl/studies.html
Other information	

The University of Warsaw has implemented the procedure for whistleblowers reporting cases of law violation and for undertaking follow-up actions. For **more information** about this topic and the processing of candidates' personal data please follow the [link](#)

The University of Warsaw is a winner of the HR Excellence in Research award granted by the European Commission to institutions adhering to the European Charter for Researchers.



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