

## JOB OFFER

Position in the project:	BSc/MSc student
Scientific discipline:	Physics
Job type (employment contract/stipend):	Stipend
Number of job offers:	1
Remuneration/stipend amount/month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	Full remuneration cost: 1500 PLN Expected net salary: 1500 PLN
Position starts on:	1 November 2021 (flexible starting date)
Maximum period of contract/stipend agreement:	12 months
Institution:	Jagiellonian University
Project leader:	Prof. dr hab. Ryszard Buczyński (University of Warsaw) / Group leader: Dr Adam Wojciechowski
Project title:	<i>Quantum-effect-based Nanosensing and imaging: Novel glass-diamond photonic approach for the next generation biodiagnostic Applications</i>  <b>Project is carried out within the TEAM-NET programme of the Foundation for Polish Science</b>
Project description:	<p>The team at the Jagiellonian University carries out experimental research on applications of nanodiamonds for precision detection of magnetic fields, temperature changes and other physical quantities, as well as for biophysical applications.</p> <p>In our research, we use nanodiamonds rich in nitrogen-vacancy (NV) color centers to detect magnetic fields with high spatial resolution ability, which results from the very small size of the diamonds used. Our goal is to develop methods and technologies for measuring and imaging fields on a micrometer scale, e.g. originating from electronic integrated circuits or biological cells. In addition, we are also developing in vivo temperature measurement techniques in living biological cells that can shed new light on the processes taking place within them during normal cell function.</p>
Key responsibilities include:	<ol style="list-style-type: none"> <li>1. Work in the optical laboratory on the development of impulse protocols for the detection and manipulation of the quantum state of the NV center</li> <li>2. Active research and presentation of results at workshops and conferences</li> <li>3. Involvement in the group's activities (seminars, group meetings, etc.)</li> </ol>
Profile of candidates/requirements:	<ol style="list-style-type: none"> <li>1. Having a Student status on the date of commencement of receiving the scholarship (bachelor's or master's degree)</li> <li>2. Good knowledge of the following subjects: <ul style="list-style-type: none"> <li>• Optics</li> <li>• Atomic physics and / or solid state physics</li> </ul> </li> </ol>

	<ol style="list-style-type: none"> <li>3. Experience in programming laboratory devices (eg in LabView, python environments) will be an advantage</li> <li>4. Documented experience in scientific work will be an additional advantage.</li> <li>5. Good command of the English language.</li> </ol>
Required documents:	<ol style="list-style-type: none"> <li>1. Curriculum vitae</li> <li>2. Brief description of scientific interests and justification for applying for the position (max. 1 page).</li> <li>3. Declaration confirming the student's status on the day of commencement of employment</li> <li>4. Name and contact (telephone / e-mail address) of at least one experienced researcher who can provide references to the candidate</li> </ol>
We offer:	<ol style="list-style-type: none"> <li>1. Scholarship 1500 PLN / month</li> <li>2. Work in a young, dynamically developing team</li> <li>3. Scientific and organizational support</li> </ol>
Please submit the following documents to:	Dr. Adam Wojciechowski <a href="mailto:a.wojciechowski@uj.edu.pl">a.wojciechowski@uj.edu.pl</a> with the subject "student in the QUNNA project".
Application deadline:	<p><b>10 October 2021</b></p> <p>Selected candidates will be invited by email for the interview (online).</p> <p>Appeals and comments on recruitment process may be sent within 7 days of forwarding the decision via the same email address.</p>
For more details about the position please visit (website/webpage address):	Project website: <a href="https://qunna.pl">https://qunna.pl</a>
Euraxess job/stipend offer (in case of PhD, postdoc, leader and young leader positions):	

Due to the entry into force of Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016, we also require that your job advertisements include a clause requesting the candidate's consent to the processing of his or her personal data by the institution which carries out the recruitment process.