

## JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Physics
Job type (employment contract/stipend):	Scholarship
Number of job offers:	4
Remuneration/stipend amount/month ("X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"):	3500 – 4500 PLN gross/month
Position starts on:	01.08.2020 or later
Maximum period of contract/stipend agreement:	2 years (with extension option)
Institution:	Centre of New Technologies, University of Warsaw
Project leader:	Konrad Banaszek
Project title:	Quantum Optical Technologies (qot.uw.edu.pl)  Project is carried out within the International Research Agenda Programme of the Foundation for Polish Science
Project description:	Successful candidates will work in one of the following groups: (1) a newly formed team of Quantum Optical Devices Laboratory working on constructing new optical devices operating in the quantum regime, demonstrating new features of quantum imaging and nonlinear light-atom interfaces. The team will be lead by Dr Michał Parniak. Potential applicants are encouraged to contact the team leader at <a href="mailto:m.parniak@cent.uw.edu.pl">m.parniak@cent.uw.edu.pl</a> . (2) Quantum Technologies Laboratory led by Prof. Konrad Banaszek investigating new modalities of communication and imaging with emphasis on mitigating effects of noise and imperfections Contact: <a href="mailto:k.banaszek@cent.uw.edu.pl">k.banaszek@cent.uw.edu.pl</a>
Key responsibilities include:	Depending on individual inclinations one or more of: <ol style="list-style-type: none"> <li>1. Reading scientific publications and discussing the results in the fields of light-matter interfaces and quantum imaging.</li> <li>2. Design and operation of optical setups. Data taking and analysis.</li> <li>3. Analysis of noise and imperfections in quantum protocols.</li> <li>4. Simulation of physical systems and extraction of theoretical conclusions.</li> <li>5. Design and construction of electronics, building test setups, and preparing their documentation.</li> <li>6. Preparation of the documentation for future optical or electronics experiments : defining specifications of optical components and assemblies, matching COTS components, contacting vendors and discussing custom specifications with them.</li> <li>7. Management of repositories of python or LabVIEW script to automate experiments, deploying them on workstations, ensuring smooth transitions between versions.</li> <li>8. Performing calibrations and measurements and checking their correctness.</li> </ol>

	<p>9. Participaton in preparing scientific publications.</p> <p>All tasks will be coordinated with group effort and performed under supervision of senior members.</p>
Profile of candidates/requirements:	<p>PhD candidates should have a master degree and experience in at least one of the fields: optical physics/photonics, electronics, python or other scripting language, labview, mathematica, commensurate with the education level of the candidate.</p> <p>PhD candidates should be registered as a PhD student at a Polish university, on the date of commencing work on the project.</p> <p>University of Warsaw strongly values the diversity of candidates and is very committed to the equality of opportunity.</p>
Required documents:	<ol style="list-style-type: none"> <li>1. Online questionnaire (submitted via online form)</li> <li>2. Curriculum vitae with research records</li> <li>3. Academic transcript</li> <li>4. Contact details of at least one senior researcher familiar with candidate's work</li> <li>5. Consent clause for processing personal data in the application process, signed and scanned, or electronically signed, that can be downloaded from <a href="http://qot.cent.uw.edu.pl/positions/">http://qot.cent.uw.edu.pl/positions/</a> .</li> <li>6. Optionally: report or other documentation conerning electronics or programming or optical projects completed so far.</li> </ol>
We offer:	<p>Participation in an exciting research program conducted within a newly established centre with high scientific expectations and goals.</p> <p>Work within one of the labs operating within the QOT unit, yet in close collaboration with centre's theoretical and experimental groups, as well as other research teams specialising in quantum theory and its implementations within Warsaw's research community.</p> <p>An open and friendly research environment with access to all the facilities available within the Centre of New Technologies (CENT)—an interdisciplinary research institute established within the University of Warsaw to gather international researchers of different backgrounds and experience, in order to conduct state-of-the-art research in biological, chemical and physical science: <a href="http://cent.uw.edu.pl/en/">http://cent.uw.edu.pl/en/</a>.</p> <p>Close collaboration with foreign institutions, with the necessary financial support of travels and scientific visits provided by the Centre for Quantum Optical Technologies, in particular, with the University of Oxford (UK)—the strategic partner of the Unit.</p>
Please submit the following documents to:	<p>Please send the application via email to <a href="mailto:qot-jobs@cent.uw.edu.pl">qot-jobs@cent.uw.edu.pl</a></p> <p>Fill online questionnaire at <a href="https://forms.gle/FSGJWpXuHNYfqfhg8">https://forms.gle/FSGJWpXuHNYfqfhg8</a></p>
Application deadline:	19 June 2020
FNP programme	International Research Agenda Programme
For more details about the position please visit (website/webpage address):	wypetnia Sekretariat
Euraxess job/stipend offer (in case of PhD and post doc positions):	