

JOB OFFER

Position in the project:	Assistant professor, Research Team Leader
Scientific discipline:	Physics
Job type (employment contract/stipend):	Employment contract, full time equivalent (100% time)
Number of job offers:	1
Remuneration/stipend amount/month (<i>"X0 000 PLN of full remuneration cost, i.e. expected net salary at X 000 PLN"</i>):	15 000 PLN of full remuneration cost, i.e. expected average net salary at about 8 500 PLN per month
Position starts on:	1 October 2019
Maximum period of contract/stipend agreement:	46 months
Institution:	Jagiellonian University of Krakow, Faculty of Physics, Astronomy and Applied Computer Sciences
Project leader:	Prof. dr hab. Wojciech Gawlik
Project title:	<i>QU</i>antum-effect-based <i>N</i>anosensing and imaging: <i>N</i>ovel glass-diamond photonic approach for the next generation b<i>io</i>diagnostic <i>A</i>pplications (<i>QUNNA</i>) <i>Project is carried out within the TEAM NET programme of the Foundation for Polish Science</i>
Project description:	<p>Project evolves around new photonic materials, components and systems based on implemented color centers or defects in the crystalline diamond, with specific magnetic and optical properties. It addresses societally significant areas, including highly sensitive cancer cell detection and nano-magnetic tagging of biological matter.</p> <p>The Project is realized by a Consortium of 4 partners: Faculty of Physics, University of Warsaw (Consortium leader); Jagiellonian University in Kraków, Faculty of Physics, Astronomy and Applied Computer Science; Gdańsk University of Technology, Faculty of Electronics, Telecommunications and Informatics; and Institute of Biotechnology and Molecular Medicine.</p> <p>The Research team located at Jagiellonian University in Krakow shall work on development of methodology of optical and microwave spectroscopy based on quantum and coherence effects for applications in sensorics and magnetic imaging. In particular, they will focus on development of novel experimental methods, such as spectral hole burning, application of nanodiamonds captured in optical tweezers and <i>patch clamp techniques</i> for studies of biological samples.</p>
Key responsibilities include:	<ol style="list-style-type: none"> 1) establishing and supervising a research team working in the area of photonics based on colour centers in diamond with the methodology of optical and microwave spectroscopy. 2) organizing and executing edge-cutting research, which shall contribute to positioning of all four Research Teams of the Consortium at the forefront of scientific progress in the field of nano-structured photonic devices for sensing and imaging applications, 3) acting on efficient dissemination of research results and development of the research field by active participation in the international scientific exchange including participation in scientific conferences and publications in top scientific journals (JCR list).

	<p>4) supervising scientific development of young members (MSc and PhD students) and engagement in scientific development of the whole Research Team,</p> <p>5) pursuing potential industrial collaborations,</p> <p>6) regular reporting to the Project Leader, the Project Management Committee and the Scientific and Economic Committee of the Project on the project's progress.</p>
Profile of candidates/requirements:	<p>1) PhD degree in the field relevant to the Project's agenda and specifically to the objectives of the Research Team to be established at Faculty of Physics, Astronomy and Applied Computer Sciences of the Jagiellonian University of Warsaw (physics, electronics, materials science) obtained not earlier than in 2011. Candidates who by the application deadline finished a similar project, in particular Polish LIDER (NCBR) or SONATA Bis (NCN), are not entitled to apply to this TEAM-Net program.</p> <p>2) proven track record in managing of research projects and in managing a research team,</p> <p>3) significant publication track record in areas related to the Project agenda,</p> <p>4) proven track record in supervising of PhD students (in charge of formal co-advisor or assisting advisor);</p> <p>5) proven track record in international scientific collaboration in fields related to the Project agenda,</p> <p>6) knowledge of fabrication methods of the NV-diamond sensors, their characterization, optimization and biological applications.</p> <p>7) knowledge and hands-on experience with experiments using optical and microwave spectroscopy, particularly with NV diamonds or similar systems. Experience with designing, constructing and optimizing experimental apparatus: microscope and imaging setups, experience with spin-manipulation techniques, designing and application of RF and microwave electronic equipment, detection techniques, noise filtration, PC programming for data acquisition.</p>
Required documents:	<p>1. Application for the position (in a pdf-format and containing a scanned original signature).</p> <p>2. Information on the processing of personal data - information clause and consent clause - attachment to the announcement (available on the website https://dso.uj.edu.pl/druki-do-pobrania/dokumenty-dla-kandydatow-pracownikow). Please use the pdf-file with a scanned signature confirming reading and understanding of the information.</p> <p>3. CV of the candidate,</p> <p>4. One to five attachments illustrating candidate's major achievements in recent 10 years, such as:</p> <ul style="list-style-type: none"> a. full texts of publications (in the original language) or b. full texts of patents (in the original language; sole patent applications are not regarded as the achievement), or c. descriptions of implementations, <p>5. Description of the originality and groundbreaking nature of the listed achievements and their impact on the development of specific fields of science as well as a description of the major achievements and results of the most recently completed project (up to 3 A4 pages),</p> <p>6. Brief description of the research assumptions and methods which will be used in the R&D work of the research team managed by the candidate within the Project. Indication of possible foreign coworkers and partners may be helpful (up to 4 A4 pages).</p> <p>7. Copy of PhD diploma or a formal confirmation of PhD degree.</p> <p>8. Candidate's consent to the processing of his/her personal data by the Jagiellonian University in Kraków.</p>
We offer:	<p>+ Work in ambitious team at the leading Polish University with 650 year's tradition and state-of-the-art research infrastructure</p> <p>+ Close cooperation with the other research teams of the Consortium, who represent the top Polish research centers in the project's field</p> <p>+ Participation in international scientific exchange</p> <p>+ Competitive salary</p>

	+ Funds for starting and running of a research team. Total funding in the project planned for remuneration of the research team leader and postdocs is 1 590 000,00 PLN PLN, and total funding for scholarships and training of PhD students and undergraduate students is 1 116 800,00 PLN.
For more details about the position please visit (website/webpage address):	https://fais.uj.edu.pl
Euraxess job/stipend offer (in case of PhD and postdoc positions):	
Please submit the following documents to:	Professor Wojciech Gawlik, email: gawlik@uj.edu.pl with a note: "QUNNA Research team leader UJ" in the subject line Candidates, with negative results of the recruitment, may appeal within 7 days after announcement of the results to: gawlik@uj.edu.pl
Application deadline:	20th of July 2019

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.