

## JOB OFFER

Position in the project:	Student
Scientific discipline:	Physics / optics / electronics / informatics / mathematics
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”):	Net stipend amount 2000PLN
Position starts on:	Not earlier than January 1 <sup>st</sup> 2022
Maximum period of contract/stipend agreement:	To July 31 <sup>st</sup> , 2022
Institution:	Nicolaus Copernicus University
Project leader:	dr hab. Maciej Szkulmowski, prof. UMK
Project title:	<i>FreezeEYE Tracker – ultrafast system for image stabilization in biomedical imaging</i>
Project description:	<p>The main goal of the project is to build an ultrafast optoelectronic device FreezeEye Tracker for image stabilization in various imaging devices used in biomedicine and industry. The feasibility study of the proposed solutions and verification of the performance of the system will be demonstrated in the human eye with two gold standard imaging techniques: scanning laser ophthalmoscope (SLO) and optical coherence tomography (OCT).</p> <p>The project is suited in translational science, thus to achieve the aim of the project a professional interdisciplinary team of young scientists will be built. The team will require development of initial skills in optical engineering, electronics, informatics and medical diagnostics and will become proficient in prototyping optical instrumentation for biomedical imaging. The team will undergo R&amp;D training starting from designing through implementation of fully functional demonstrator to testing its functionality in the clinical practice.</p> <p>The project is conducted by NCU in a consortium with a spin-off company AM2M.</p>
Key responsibilities include:	<p>Participation in team work covering one of the following project areas:</p> <ol style="list-style-type: none"> <li>1. Development of procedures for quantitative eye-motion trajectories analysis acquired from retinal eye-tracker,</li> <li>2. conducting experiments with retinal eye-tracker in laboratory and medical clinics.</li> </ol> <p>All candidates will also be expected:</p> <ol style="list-style-type: none"> <li>1. To present results of the project in written and oral manner (publications, conferences).</li> <li>2. To collaborate with other members of the group towards the success of the project.</li> </ol>

Profile of candidates/requirements:	<ol style="list-style-type: none"> <li>1. Good communication level in English (oral and written) and good presentation skills.</li> <li>2. High motivation and enthusiasm for scientific activity in a multidisciplinary team.</li> </ol> <p>Additionally, depending on the area of coverage in the project any of the following will be a strong advantage:</p> <ol style="list-style-type: none"> <li>1. Experience in Python programming in the area of data science/image processing.</li> <li>2. Experience in C/C++/C# programing.</li> <li>3. Experience in GPU programming (CUDA).</li> <li>4. Experience in programming FPGA (Xilinx).</li> </ol>
Required documents:	<ol style="list-style-type: none"> <li>1. Application/motivation letter.</li> <li>2. A copy of the BSc diploma and transcript of records from undergraduate studies.</li> <li>3. Scientific curriculum vitae describing education, employment history, previous participation in research projects, collaborations, internships, stipends, conferences, list of publications, other achievements as well as scientific interests</li> <li>4. Recommendation letters from senior scientists are welcome.</li> </ol>
We offer:	<ol style="list-style-type: none"> <li>1. Opportunity to train and develop in a rapidly developing field of biomedical imaging.</li> <li>2. Access to well-equipped biomedical imaging facilities in one of the best physics departments in Poland.</li> <li>3. Participation in scientific or skills courses, conferences and R&amp;D trainings.</li> <li>4. Flexible work time in friendly environment.</li> </ol>
Please submit the following documents to:	<p><a href="mailto:maciej.szkulmowski@fizyka.umk.pl">maciej.szkulmowski@fizyka.umk.pl</a></p> <p>Selected applicants will be asked to participate in talks held in the NCU or via teleconference call. The talks will be held after January 11<sup>th</sup> 2022.</p>
Application deadline:	January 10 <sup>th</sup> , 2022
For more details about the position please visit (website/webpage address):	-
Euraxess job/stipend offer (in case of PhD and postdoc positions):	

Please include in your offer:

“I hereby give consent for my personal data included in my application to be processed for the purposes of the recruitment process under the Personal Data Protection Act as of 29 August 1997, consolidated text: Journal of Laws 2016, item 922 as amended.”