

JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Physics (optics, biophotonics)
Job type (employment contract/stipend):	Employment contract
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"):	5 500 PLN/month gross (expected net salary ~ 3 800 PLN)
Position starts on:	1 st November 2017
Maximum period of contract/stipend agreement:	3 years
Institution:	Institute of Physical Chemistry, Polish Academy of Sciences
Project leader:	Prof. dr hab. Maciej Wojtkowski
Project title:	<i>Two photon vision and two photon eye imaging (2x2 PhotonVis)</i> <i>Project is carried out within the TEAM-TECH programme of the Foundation for Polish Science.</i>
Project description:	The general concept of this proposal is directed towards the development of novel in vivo imaging modalities, dedicated to functional retinal screening utilizing two-photon absorption process. The vision directly depends on the state of active pigments present in photoreceptors and retinal pigmented epithelial cells. The active pigments are accessible via two-photon absorption process – either by measuring intensity attenuation or by two-photon excited fluorescence. By using these approaches, we have already demonstrated that humans can perceive Near Infrared radiation due to two-photon isomerization of rhodopsin chromophores. In the first part of this project, we will exploit this phenomenon and introduce objective and functional testing of the human retina based on two-photon absorption measurement. In the second part, we will focus on delivery of short light pulses to retinal pigmented epithelial cells to improve sensitivity of two-photon excited fluorescence imaging in rodent eyes.

Key responsibilities include:	<ol style="list-style-type: none"> 1. Help in project implementation, by following the training in two photon absorption and advanced phase control techniques 2. Construction of in vivo imaging microscope for rodent retina 3. Development of new wavefront engineering methods for short pulse delivery to animal retina
Profile of candidates/requirements:	<ol style="list-style-type: none"> 1. University degree in physics/engineering (optics, automatics, informatics, electronics); 2. Initial experience in experimental work in the field of optics; 3. Skills in C++, Python, LabView or MatLab; 4. Good command of English.
Required documents:	<ol style="list-style-type: none"> 1. Curriculum vitae (with the list of scientific achievements and information regarding mobility in his/her scientific career); 2. A job application; 3. A scan or photocopy of the candidate's university degree; 4. At least one reference letter; 5. A copy of language certificate (applicable to candidates from countries other than Poland); 6. Consent to the processing of the candidate's personal data for the purposes of the competition http://ichf.edu.pl/Oswiadczenie-declaration.doc; 7. The candidate's declaration he/she has become acquainted with the General Rules Governing Competitions for Research Posts at the IPC PAS in Warsaw.
We offer:	<ul style="list-style-type: none"> • Long-term contract (3 years supported by TEAM-TECH grant); • Attractive salary; • Opportunity to work in interdisciplinary research department with strong support from chemistry and physics groups within the Institute; • Position in the professional and dynamically developing innovative team.
Please submit the following documents to:	<p>mwojtkowski@ichf.edu.pl and apawlus@ichf.edu.pl (contact person for employment)</p>

31st August, 2017

Application deadline:

Kindly specify in the application topic: *Application for PhD student position at the POB group (TEAM TECH project).*

Successful candidates fulfilling main eligibility criteria will be first invited for an interview qualifying to International PhD Studies at IPC PAS on 2nd October, 2017. Qualified candidates with the best results will be then invited for 2nd round of interview with Recruitment Committee. One candidate will be chosen. The competition results shall be announced by mid-October 2017.

For more details about the position please visit (website/webpage address):

Euraxess job/stipend offer (in case of PhD and postdoc positions):

<https://euraxess.ec.europa.eu/jobs/228147>

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.”