

JOB OFFER

Position in the project:	PhD Student
Scientific discipline:	Electronics
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*):	4000 PLN / month (net)
Position starts on:	October 2019
Maximum period of contract/stipend agreement:	1.10.2019 – 31.05.2021
Institution:	Wrocław University of Science and Technology; Faculty of Electronics; Chair of EM Field Theory, Electronic Circuits and Optoelectronics
Project leader:	Dr. Grzegorz Soboń
Project title:	“Fiber-based mid-infrared frequency combs for laser spectroscopy and environmental monitoring” <i>Project is carried out within the First TEAM programme of the Foundation for Polish Science</i>
Project description:	The main goal of the proposed project is to develop novel types of fiber-based optical frequency combs in the mid-infrared spectral range, which will be suitable for field deployment and outside-lab operation. Such sources are on demand of many applications, particularly laser spectroscopy, e.g. fast and sensitive detection of multiple air pollutants (especially greenhouse gases) at a time. The broad spectral coverage of frequency combs allows to overcome the major limitation of existing spectroscopic techniques and enables measurement of entire molecular bands and simultaneous monitoring of multiple gas species. The project will be conducted in close cooperation with three recognized partners: Dr. Aleksandra Foltynowicz (Umeå University, Sweden), Dr. Gerard Wysocki (Princeton University, US), and Dr. Piotr Masłowski (Nicolaus Copernicus University in Toruń, Poland), world leading researchers with proven track records in the field of optical frequency combs and laser spectroscopy
Key responsibilities include:	<ol style="list-style-type: none"> 1. Development of fiber-based optical frequency combs in the mid-infrared 2. Research on novel fiber lasers and spectrometers for trace-gas detection 3. Experimental work on laser spectroscopy – detection of small amounts of gases and air pollutants 4. Development of device prototypes, performing environmental tests, data interpretation and analysis.
Profile of candidates/requirements:	<ol style="list-style-type: none"> 1. Preferred background: electronics, technical physics, optics, or similar 2. Required English language skills at minimum B2 level 3. Strong motivation 4. Availability and mobility
Required documents:	<ol style="list-style-type: none"> 1. Curriculum vitae with emphasis on scientific achievements and publications, research activities, awards, etc.

	<ol style="list-style-type: none"> 2. Copy of MSc diploma, or a statement from the university about the planned date MSc defense + confirmation of application for a PhD studies programme at the university. 3. List of grades from BS and MS studies 4. Copy of MSc thesis (electronic version) <p>Selected candidates will be invited to an interview with recruitment board consisting of at least 2 recognized scientists from the area of photonics and optics.</p> <p>The board will rate the applications taking into account:</p> <ol style="list-style-type: none"> 1) Competences of the Candidate, i.e. experience in similar research projects (lasers, spectroscopy, etc.) 2) Research achievements of the Candidate (grades obtained during studies, publications, research activities) 3) Awards and prizes obtained by the Candidate <p>All candidates will be informed via e-mail about the results of the competition.</p>
We offer:	<ol style="list-style-type: none"> 1. Participation in a very attractive scientific program focused on applied research 2. Work in a recognized team of researchers 3. Access to unique top-level equipment 4. Dissemination of your results in scientific journals 5. Great opportunities to accomplish a very interesting PhD course 6. Participation in scholarships, schools, research visits, etc.
Please submit the following documents to:	grzegorz.sobon@pwr.edu.pl
Application deadline:	15.08.2019
For more details about the position please visit (website/webpage address):	www.comb.pwr.edu.pl
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."