

JOB OFFER

Position in the project:	PhD student
Scientific discipline:	Chemistry
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*):	3 500 PLN
Position starts on:	01.03.2018
Maximum period of contract/stipend agreement:	28.02.2021 (3 years)
Institution:	Cracow University of Technology, Faculty of Chemical Engineering and Technology, Laboratory of Photochemistry and Optical Spectroscopy
Project leader:	Joanna Ortyl
Project title:	<p>Molecular design, synthesis and application of photoinitiator-catalysts (PICs) for photopolymerization reactions</p> <p><i>Project is carried out within the TEAM TECH programme of the Foundation for Polish Science</i></p>
Project description:	<p>Due to the constant search for very effective photoinitiating systems in the manufacturing of polymer coatings and also in the fast 3D imaging technologies, the research plan has been proposed regarding the application issues expanded to include cognitive aspects relating to the development of new, high-performance photoinitiator-catalyst systems (PICs), showing the versatility of action through the possibility of photochemical initiating of all type of standard photopolymerization processes, such as cationic photopolymerization (CP), free-radical polymerization (FRP), radical induced cationic polymerization (FRCP), thiol-ene photopolymerization and hybrid photopolymerization (HP).</p>
Key responsibilities include:	<ol style="list-style-type: none">1. Synthesis of photoinitiator catalysts (PICs).2. Spectrophotometric and electrochemical research of developed photoinitiator catalysts (for example measurement of fluorescence lifetimes, determination of fluorescence quantum yield, registration of excitation, emission spectra and absorption spectra, electrochemical measurements, determination of oxidation and reduction potentials, etc.).3. Qualitative and quantitative research on the usefulness of developed compounds for the role of photocatalysts initiating systems (photoinitiator-catalyst systems - PICs).4. Kinetics studies of photopolymerization processes initiated with developed photocatalysing initiating systems.

Profile of candidates/requirements:	<ol style="list-style-type: none"> 1. Master's degree in one of the following disciplines: chemistry or chemical technology. 2. Statute of PhD student in chemistry or chemical technology at the latest on the day of starting the tasks in the project. 3. Experience in laboratory work in chemistry and / or chemical technology, eg active participation in scientific groups, internships scientific and / or industrial studies. 4. Knowledge of spectroscopic techniques: IR, NMR, UV-Vis. 5. Very good or good academic results during master's and engineering (or undergraduate) studies. 6. Knowledge of English at least good level enabling analysis of specialist literature and preparation of scientific articles. 7. Communication abilities and ability to work in a team.
Required documents:	<ol style="list-style-type: none"> 1. Curriculum Vitae with the list of publications, conference presentations and other achievements. 2. Letter of motivation with description of scientific and technical achievements and scientific interests. 3. Scan diploma of master's degree 4. An official list of grades from I st and II nd stage of studies. 5. Certificate of PhD student status.
We offer:	<p>Participation in interdisciplinary research. Ability to work in a young, energetic team. Possibility to hold research internships in national and foreign scientific centers. Possibility of completing an internship in the R & D department of a chemical company. Participation in international and national conferences and trainings. Support in scientific work and great opportunities for scientific development.</p> <p>If you join our team, we will expect your full engagement in the project realization. We appreciate creativity, responsibility, and open attitude, especially when dealing with complex research problems.</p>
Please submit the following documents to:	All materials should be submitted in electronic form to the address: jortyl@chemia.pk.edu.pl with PhD-TEAM TECH in the subject.
Application deadline:	23.02.2018
For more details about the position please visit (website/webpage address):	More information can be obtained from Joanna Ortyl jortyl@chemia.pk.edu.pl
Euraxess job/stipend offer (in case of PhD and postdoc positions):	https://euraxess.ec.europa.eu/jobs/273604

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."