JAGIELLONIAN UNIVERSITY IN KRAKÓW

JOB OFFER

Position: PhD student

Scientific discipline: Chemistry, materials science

Job type: Stipend

Number of stipends: 3

Stipend's amount: 3500 zloty/month

Position starts on: October 1st, 2017

Maximum period of stipend agreement: 3 years

Institution: Faculty of Chemistry, Jagiellonian University in Kraków, Poland

Project leader: Prof. Wojciech Macyk

Project title: "In quest of a more efficient quantum solar energy exploitation in energy downhill and uphill photocatalytic processes"

(Project is carried out within the TEAM programme of the Foundation for Polish Science)

Project description: The goal of this project is to elaborate various photocatalytic and hybrid photocatalytic/catalytic materials with significantly improved efficiencies of quantum solar energy utilization. The project assumes design and synthesis of new photocatalysts in various forms offering high efficiencies of oxidation of organic pollutants or high quantum yield of photon to chemical energy conversion (production of solar fuels). A variety of photoactive catalysts, including hierarchical photocatalytic/catalytic materials, photonic/photocatalytic hybrid materials and defected materials with fine-tuned electronic properties will be designed and studied. The photocatalysts will be optimized towards their application in photocatalytic detoxification of waters and solar fuels production. The photocatalytic materials will be elaborated in cooperation with partners from Germany, Canada, Poland, Australia and Japan. Our project should foster research on photocatalytically active advanced materials and push forward understanding of primary physical and chemical processes taking place in such systems.

Key responsibilities:

Realization of the sub-projects No. 1, 2, 4:

1. Hierarchical photocatalytic and catalytic materials
2. Photonic materials for photocatalytic applications
4. Downhill and uphill processes – towards applications

Profile of candidates:

1. Master degree in chemistry or related disciplines (e.g. materials science)
2. Good background in chemistry, materials science and photochemistry
3. High motivation for scientific work
4. Research experience will be advantageous
5. Good command in English

Required documents:

1. Application form (available on the website: www.fotokataliza.pl)
2. Motivation letter with description of candidate's research interests
3. Curriculum vitae including: list of awards, papers, conference presentations, trainings
4. Degree certificates
5. A letter of recommendation

Please submit the following documents to: macyk@chemia.uj.edu.pl

For more details about the position please visit: www.fotokataliza.pl

Application deadline: September 17th, 2017

Approximate interview date: September 19th -22nd, 2017

We thank all candidates for their interests. We will contact the best candidates only.

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."