

JOB OFFER

Position in the project:	<u>researcher for scientific research</u>
Scientific discipline:	Chemistry
Job type (employment contract/stipend):	<u>ADDENDUM to the employment contract</u>
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"):	<u>max. 40% (basic salary + functional supplement), max approx. PLN 1580 PLN all cost</u>
Position starts on:	01.03.2018
Maximum period of contract/stipend agreement:	31.08.2018
Institution:	Cracow University of Technology, Faculty of Chemical Engineering and Technology, Laboratory of Photochemistry and Optical Spectroscopy
Project leader:	Joanna Ortyl
Project title:	Synthesis and photochemistry/photophysics studies of the intelligent luminescent molecular sensors for selective detection in biochemistry and chemistry <i>Project is carried out within the REINTEGRATION (POWROTY) programme of the Foundation for Polish Science</i>
Project description:	The main purpose of this project is the synthesis of new high performance luminescent molecular sensors as well as their quantitative spectrophotometric and spectrofluorometric studies. The developed novel systems will be examined for their suitability, efficiency and effectiveness in real time monitoring of a variety processes using spectrometric methods. The prepared systems will be characterized in terms of their lifetime and quantum yield of fluorescence, photostability, Stokes' shift and the value of the dipole moment in the excited state. Probes will be applied in biological and chemical studies as well as pharmaceutical and polymer industry, and environmental protection.
Key responsibilities include:	<ol style="list-style-type: none"> 1. Synthesis of a series of compounds for the role of molecular luminescent sensors. 2. Spectrophotometric, spectrofluorometric and electrochemical research of developed luminescent molecular sensors. 3. Qualitative and quantitative research of the usefulness of developed molecular luminescent sensors in biochemical applications. 4. Qualitative and quantitative research of the effectiveness and usefulness of developed molecular luminescent sensors for polymeric materials. 5. The examination of usefulness of developed molecular

	luminescent sensors in analytical and environmental applications.
Profile of candidates/requirements:	<p>Qualification requirements:</p> <ul style="list-style-type: none"> • doctoral degree in chemical sciences • experience at a workplace requiring contact with students at a university • experience in creative laboratory work confirmed by scientific publications (please attach scans of the first pages of scientific articles where the candidate would be the first author) • predispositions to establish scientific contacts supported by completed academic internships • scientific experience in the field of synthesis of fluorescent compounds • ability to use the apparatus to: <ul style="list-style-type: none"> a) testing of physicochemical properties of liquids and gases (chromatographic methods), b) UV-VIS, FT-IR, XPS, fluorescence spectroscopy • ability to process and analyze test results: <ul style="list-style-type: none"> a) spectroscopy (IR, UV-Vis, NMR, fluorescent XPS), b) mass spectrometry, c) chromatography (GPC, HPLC, GC); • Software knowledge: <ul style="list-style-type: none"> a) installation and configuration of operating systems and application programs, b) to use in the didactic and research work software: office (for example: MS Word, MS Excel, MS PowerPoint), for analyzing the results of spectroscopic and mass spectrometry research • documented knowledge of English
Required documents:	<ol style="list-style-type: none"> 1. 1. CV with a description of the candidate's scientific achievements (max. 10 A4 pages). 2. 2. Photocopy of the diploma with the degree of doctor of chemical sciences 3. 3. Photocopy of certificates of completed scientific internships 4. 4. Photocopy of scientific publications (the first page of the article is enough) where the candidate is the first author certifying scientific experience in the field of synthesis of fluorescent compounds
We offer:	Participation in interdisciplinary research. Ability to work in a young, energetic team.
Please submit the following documents to:	All materials should be submitted in electronic form to the address: jortyl@chemia.pk.edu.pl with RESEARCHER-POWROTY in the subject.
Application deadline:	23.03.2018
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):	-

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

