

# JOB OFFER

**Position in the project:** SENIOR TECHNICAL ASSISTANT

**Scientific discipline:** CHEMISTRY

**Job type:** employment contract

**Number of job offers:** 1

**Remuneration /month:** 3500 PLN/month of full remuneration cost, i.e. expected net salary at 2200 PLN/month

**Position starts on:** 01-12-2016

**Maximum period of contract:** 22 months

**Institution :**

Cracow University of Technology,  
Faculty of Chemical Engineering and Technology,  
Warszawska 24 St.  
31-155 Cracow, Poland

**Project leader:** Joanna Ortyl, PhD

**Project title:** *Synthesis and photochemistry/photophysics studies of the intelligent luminescent molecular sensors for selective detection in biochemistry and chemistry.*

**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:**

1. Spectrophotometric and electrochemical research of developed luminescent molecular sensors.(for example measurement of fluorescence lifetimes, determination of fluorescence quantum yield, registration of excitation, emission spectra and absorption spectra, etc.).
2. Qualitative and quantitative research of the effectiveness and usefulness of developed molecular luminescent sensors for polymeric materials in chemistry and in biochemistry. Research includes - imaging of the distribution of molecular luminescence sensors in polymer matrix during in-situ and on-line polymerization processes. (collaboration with Institute of the Polish Academy of Sciences).
3. Develop and reporting of results from measurement

## Profile of candidates/requirements:

### 1. Education:

- Higher education, completed a study in chemical technology
- Statute doctoral student - student studies III degree in chemical technology
- Completed postgraduate studies in the field of biotechnological sciences

### 2. Work experience:

- A min. of 3 months work in industry.
- A min. of 3 months industrial internship.

### 3. Additional qualifications:

- Documented completed courses / training skills in project management research and research on a national and international expertise in the field of entrepreneurship and soft skills necessary to work in a team composed of representatives of domestic and foreign research institutes and industry.
- Very good knowledge of standards, methodologies and procedures by REACH

### 4. Knowledge of foreign languages:

- Very good knowledge of the English language [work with language, participation in international projects, foreign trips, conferences and training courses, publications and the implementation of the doctoral program in English].

### 5. Additional experience:

- Experience of working in a research project on a related position
- Welcome experience as head of a research project

### 6. Professional skills.

Experience in working in a laboratory, including: literature review and planning of experiments, testing, alteration and improvement of synthesis, conducting and description of analyses, creating documentation, taking records of reagents and participation in inventories, purchasing, selection of suppliers, placing orders and delivery control, implementation of complaints, cooperation with couriers and preparing reagents for transport, installation, maintenance and calibration of the laboratory equipment and software for chemical analysis, settlement of finances in regards to the carried out activities.

Knowledge of specialized software used and used in laboratory work: Mendeley Desktop, Thermal Universal Analysis 2000, Accelrys Draw, Chemskech, EasyLife L Software, OMNIC Series Software, FelixGX, QuantaMaster 40, Photo-DSC 204 F1 Phoenix, SpectraWiz.

## Required documents:

1. CV with a description of the scientific achievements of the candidate (max 10 A4 pages).
2. The certificate from the dean's office about the status of the student or Student Visa - if a student from outside the European Union.
3. Photocopy of the diploma of studies in chemical technology.
4. Photocopy of the diploma of postgraduate studies in the field of biotechnological sciences.
5. Photocopy certifying a minimum of 3 months of work in the form of a work certificate issued by the employer.
6. Photocopy certifying a minimum of 3 months that received industrial internship in the industry.
7. Photocopy certifying skills in project management research and research on a national and international expertise in the field of entrepreneurship and soft skills necessary to work in a team composed of representatives of domestic and foreign research institutes and industry.
8. Photocopies of confirming the experience of working in a research project as project manager research - these documents are welcome.
9. List of ratings to the subjects of the last year together **with the calculated average for the last year of study.**

**Please submit the following documents to:**

The required documents must be submitted to the Department of Personal and Social Affairs, Warszawska 24 street, room137 at the Faculty of Civil Engineering between 7:00-15:00 in the period to 23.11.2016 r.

Package with documents should contain the following: 'refers to the competition for the position of SENIOR TECHNICAL ASSISTANT in the C-5 ("Project Returns").

Documents can also sent by post to the following address: Cracow University of Technology Department of Personal and Social Affairs, Warszawska 24, 31-155 Cracow, Poland (the delivery date of the documents will be considered).

Cracow University of Technology reserves the right to contact only selected candidates and the right to notification of the decision on filling the post only the selected candidate.

Documents can be picked up at the Department of Personal and Social Affairs Warszawska 24 in the room 137 between 19.12.2016r. to 13.01.2017r. Documents that are not received within this period, will be destroyed.

**Application deadline: 23-11-2016**

**For more details about the position sent e-mail: [jortyl@chemia.pk.edu.pl](mailto:jortyl@chemia.pk.edu.pl)**

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."