

Scholarship for PhD student in OPUS project at Faculty of Chemical Technology

Number of positions: 1

Requirements:

A research scholarship may be awarded to a person who is a PhD student at the time of starting the implementation of the project tasks.

Other requirements:

- Professional title of Master of Science or Master of Science in Chemistry, Chemical Technology or related fields.
- Knowledge of the synthesis of organic compounds
- Ability to interpret IR and NMR spectra

Ability to operate laboratory/analytical equipment (including TLC, CC, FT-IR)

Ability to operate computer software enabling the preparation of text and graphic documents (scientific text, oral presentation, poster): Microsoft Word, Powerpoint, Excel, CorelDraw.

- Good knowledge of English enabling the use of scientific literature.
- Resourcefulness, motivation for scientific work, great commitment to the research work performed and the ability to work in a team.

Description of tasks:

As part of the implementation of research tasks in the NCN project " ". The work will be carried out under the supervision of dr hab. inż. Karolina Wieszczycka, prof. PP at the Institute of Chemical Technology and Engineering, Faculty of Chemical Technology, Poznan University of Technology.

The duties of the PhD student/scholarship holder will include Co-investigation of Tasks: 1. Synthesis of N-alkyloxy-1-(pyridin-3-and -4-yl)ethanimines, N-alkyloxy-1-(pyridin-3-and -4-yl)imidamides, N-alkyl pyridine-3and 4-carboxyamides 2. Synthesis of task-specific ionic liquid: 3- and 4-[1-(alkyloxyimine)ethyl]-1-(propyl)pyridinium chlorides, 3- and 4-[1-amine(alkyloxyimine)]-1-(3-trialkyloxysilylpropyl)pyridinium chlorides, 3- and 4-(carbamoyle)-1-(propyl)pyridinium chlorides, 3- and 4-(alkylcarbamoyle) -1-(propyl)pyridinium chlorides 3. Synthesis of functionalising group precursors: 3- and 4-[1-(alkyloxyimine)ethyl]-1-(3-trialkyloxysilylpropyl)pyridinium chlorides, 3-and 4-[1-amine(alkyloxyimine)]-1-(3-trialkyloxysilylpropyl)pyridinium chlorides, 3-and 4-(carbamoyle)-1-(3-trialkyloxysilylpropyl)pyridinium chlorides, 3- and 4-(alkylcarbamoyle) -1-(3-trialkyloxysilylpropyl)pyridinium chlorides, 4. Synthesis POM-based task-specific ionic liquid (ion-exchange reaction with selected polyoxometalate)

NCN competition type: OPUS 26

Deadline for submitting offers: **October 24, 2024**

Form of submitting offers: e-mail - karolina.wieszczycka@put.poznan.pl

Employment conditions:

Form of employment: scientific scholarship

Amount of financing: 2 000 PLN per month.

Funding period: 15 months

Date of competition results: October 28, 2024

Start of work in the project: November 1, 2024.

Required documents:

CV containing a list of scientific interests, acquired skills, description of previous scientific work and a list of scientific achievements, including publications, conference presentations, awards and distinctions; list of grades from the course of studies to date, reference letter from the unit where the

internship was completed or the diploma thesis was written. Statement with information on processing personal data together with consent to their processing.

The project manager reserves the right to conduct a job interview on October 28, 2024 in order to verify the candidate's declared knowledge and skills. The competition results will be published on October 28, 2024 on the faculty and project websites, and will also be sent by e-mail.

Form of submission of offers: e-mail, to the address karolina.wieszycka@put.poznan.pl. Documents can be submitted in Polish and English