

# SCHOLARSHIP FOR A PHD STUDENT IN AN NCN OPUS PROJECT

We offer a research scholarship for a PhD student for a period of 24 months within the project funded by the National Science Centre, Poland (NCN), OPUS 2024/53/B/ST8/03269. The planned research will be carried out in the **Laboratory of Multiphase Soft Matter Systems**, within the **Soft Matter Nanostructures Research Group**, at the Jerzy Haber Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences.

## REQUIREMENTS

- a university degree in chemistry, materials science, engineering and/or chemical technology, or a related discipline
- high motivation and willingness to acquire new knowledge and skills related to the planned research
- fluency in spoken and written English
- participation in an interview to assess the candidate's competencies
- current PhD student status at the Krakow School of Interdisciplinary PhD Studies (KISD)

## TASK DESCRIPTION

The research will be carried out within the NCN OPUS project entitled “Development of technology for producing emulsions stabilized using biosurfactants dissolved in the oil phase. Increasing the potential permeability of drugs to the skin layer by complexing drugs with surfactants”.

The PhD student will carry out research tasks planned within the project, in particular the development and characterization of emulsions stabilized by biosurfactants dissolved in the oil phase, as well as the investigation of adsorption processes at interfaces and the mechanisms responsible for the stabilization of the resulting systems. An important part of the research will be to investigate the possibility of introducing biologically active compounds that do not exhibit surface-active properties into the adsorption layer by complexing them with biosurfactants through electrostatic interactions and hydrogen bonding. The research will include characterization of the resulting complexes, their surface properties, and their effects on the emulsification process and emulsion stability, with particular emphasis on the possibility of increasing the concentration of biologically active compounds at the interface. The PhD student will also be responsible for analysing and interpreting the obtained results and disseminating them through scientific publications and conference presentations.

## SCHOLARSHIP CONDITIONS

- The successful candidate will receive an NCN scholarship of **PLN 5,000 per month**.
- for a period of 24 months

## REQUIRED DOCUMENTS

- curriculum vitae (CV), including a list of scientific achievements, such as scientific publications, awards, and conference participation
- motivation letter
- Master's degree diploma (or equivalent) or a certificate confirming completion of the degree programme
- confirmation of current PhD student status at the Krakow School of Interdisciplinary PhD Studies (KISD)
- completed and signed consent to the processing of personal data and confirmation that the candidate has read the information concerning the processing of personal data in the PhD student recruitment process, in accordance with Regulation (EU) 2016/679 of the European Parliament and of the Council (GDPR). Current forms and information concerning personal data protection are available on the IKiFP PAN website.

## RECRUITMENT PROCESS

Applications should be submitted electronically to: [marcel.krzan@ikifp.edu.pl](mailto:marcel.krzan@ikifp.edu.pl), with the subject line “**OPUS-PhD-emulsion**”.

The deadline for submitting applications is **September 28, 2026**.

The competition will be concluded by **October 1, 2026**. Candidates will be notified of the outcome by e-mail.