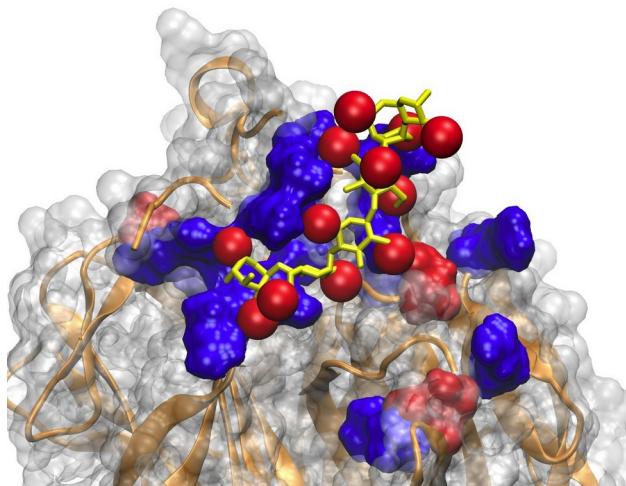


# Postdoctoral Researcher position

**OPUS 25 project from the National Science Centre**  
Decrypting the "*sulfation code*" of glycosaminoglycans  
for understanding their function in the extracellular matrix

**The goal:** is to decipher the “sulfation code” of glycosaminoglycans (GAGs), linear anionic periodic polysaccharides, under which one understands how the sulfation patterns in GAG sequence determine their conformational, dynamic, thermodynamic and interactional properties underlying broad variety of their specific functions in the extracellular matrix. The decryption of this code will allow to develop GAG-based mimetics for novel drug design in the medicine.



**Where:** Faculty of Chemistry, University of Gdańsk, Gdańsk, Poland.

## Requirements:

- PhD in Physics/Chemistry/Biology/Computer Sciences
- Experience in modeling techniques as molecular docking and molecular dynamics
- Experience in modeling protein-carbohydrate systems is an advantage
- Experience with Linux environment and scripting (python, bash, awk, R)
- Interest in the interdisciplinary aspect of the project
- Proficiency in written and spoken English
- Excellent presenting and communication skills

## Research tasks:

- Modeling protein-glycosaminoglycan systems
- Glycosaminoglycan-mimetics design
- Development of novel computational approaches and tools for these systems
- Integration of the experimental data into theoretical models
- Application of machine learning approaches
- Participation in writing publications and presentation of the results at scientific meetings

**Financial source:** OPUS 25 Grant from The National Science Centre of Poland.

**Terms of employment:** full time employment for up to 48 months, the contract is renewed each year, salary 140 000 PLN/year (brutto brutto).

**Application deadline:** 21.04.2024.

**Starting date:** 03.06.2024.

**Collaborations:** Technical University of Munich, Universities of Leipzig, Lyon, Grenoble-Alpes, Tours, Crete, Georgia, Lehigh.

**How to apply:** CV and contact data of two referees should be provided to dr hab. Sergey Samsonov to [sergey.samsonov@ug.edu.pl](mailto:sergey.samsonov@ug.edu.pl) with the topic “Postdoctoral Researcher, OPUS” until 21.04.2024.