

POSTDOC/ASSISTANT PROFESSOR

Institution: Institute of Fundamental Technological Research, Polish Academy of Sciences, Warsaw

Position in the project: Postdoc/Assistant Professor

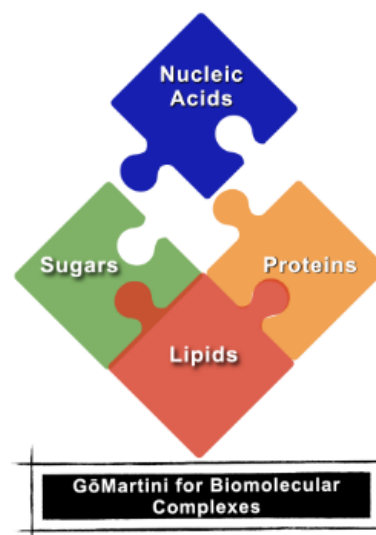
Scientific discipline: Computational Biophysics

Deadline: Dec 2024

Position starts on: April 2025

Project duration: 2 years (possibility to extend)

Project Leader: Dr. hab. Adolfo Poma Bernaola



Project Description

This research will focus on the development of the **GōMARTINI 3** for nucleic acids and further application into molecular modelling of viruses. The work will be done in collaboration with Martini 3 developers (Dr. Paulo C.T. Souza, ENS de Lyon, CNRS)) and Prof. Siewert J. Marrink (Groningen University). The project will be also involved with web-lab facilities at the IPPT-PAN (lead by Prof. Tomasz Lipniacki). For this work will employ state-of-the-art **MARTINI 3** description of proteins and single-molecule force spectroscopy (SMFS) data for the improvement of the computational model. The selected person will participate in ongoing research in the field of the nanomechanics of proteins as well as in the development of the **GōMARTINI 3** model for complex biomolecules.

Profile of candidate/Requirements

- Expert in computational biophysics and/or chemistry with knowledge in one or more of the following techniques: MD simulation, molecular docking, Machine Learning methods (e.g., MLP, Alpha Fold), enhanced sampling, MSM.
- Experience with the MARTINI 3 will be considered a strong asset
- Advanced knowledge of GROMACS, NAMD or AMBER packages
- Programming skills preferably python >2.7, c++, Lua and experience writing scripts for HPC
- Capability and interest to present their investigation results in international conferences
- Good command of English
- Reliability, creativity, ability to work in an interdisciplinary group

We offer

- Full-time salary according to IPPT assistant professor (gross salary ~7000 PLN)
- 13th salary after the first year
- Support for travel to conferences
- Short stays in our collaborator's lab in Netherland and France
- Support in grant preparation and a international environment to work

Required documents

- Cover letter
- CV including list of publication and conferences
- PhD diploma in physics/biophysics or a related branch of science
- Two recommendation letters
- Signed statement: “I agree to the processing of personal data contained in my job offer for the needs necessary to carry out the recruitment process conducted by IPPT PAN with headquarters in Warsaw, ul. A. Pawińskiego 5B, according to art. 13 para. 1 and 2 of Regulation (EU) 2016/679 of the Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data and the free movement of such data and the repeal of Directive 95/46 / EC (RODO).”

Please submit the documents to: apoma@ippt.pan.pl

For more details about the position please visit:

<http://pomalab.ippt.pan.pl/web/positions>

