

## Postdoc position available

The Department of Physical Chemistry at Gdansk University of Technology is seeking to recruit a postdoctoral researcher to work within the group of Dr. Jacek Czub on the mechanochemical coupling in the ATP synthase using molecular simulations, starting in October 2020 (salary: ca. 9000 zł/month, pretax).



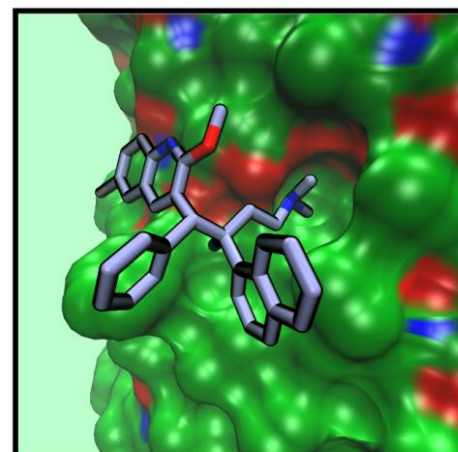
ATP synthase is—to use a phrase due to Boyer—“a splendid molecular machine” that plays a central role in cellular bioenergetics, but due to its complex structure and multiple inhibition mechanisms has also recently emerged as an attractive target for the development of novel therapeutics. The goal of the current project is to advance our understanding of the mechanism of action of ATP synthase, with a special emphasis on the possibility of selective inhibition of the microbial forms of the enzyme with small molecules. In particular, the successful candidate will use state-of-the-art multiscale molecular simulations to examine the energy conversion mechanism in ATP synthase and to identify differences in this mechanism between the protein homologues that could allow for selective inhibition.

1. All candidates have to hold a PhD degree in computational molecular biophysics, computational chemistry or physics, molecular modeling or related fields.
2. Well-documented proficiency in applying state-of-the-art simulation methods to study biology and/or chemistry related phenomena is required.
3. Experience with using free energy simulation methods and/or ab initio molecular dynamics, preferably documented by scientific papers, will be beneficial.
4. Programming skills (Python, C/C++, scripting languages), preferentially within the Linux environment, as well as prior experience in application of numerical methods will be considered strong assets.

To apply send your cover letter including research accomplishments and interests, CV, names and contact information (preferably, e-mail) of at least 2 professional referees to [jacek.czub@pg.edu.pl](mailto:jacek.czub@pg.edu.pl). Please include in your application the following the statement “I hereby give consent for my personal data included in the application to be processed for the purposes of recruitment conducted by Gdansk University of Technology”.

Detailed informations are available from the principal investigator, Dr. Jacek Czub, to whom all applications should be addressed:

e-mail: [jacek.czub@pg.edu.pl](mailto:jacek.czub@pg.edu.pl)  
[www.chem.pg.edu.pl/kbm](http://www.chem.pg.edu.pl/kbm)  
 Gdansk University of Technology  
 Chemistry Building A, room 219A  
 Narutowicza St. 11/12, 80-233 Gdańsk



(please consult all important details until the application deadline, which is due on **August 31, 2020**)