



Soft Condensed Matter group

2x PhD student positions

- **Job title:** PhD student – scholarship (2 positions).
- **Job summary:** PhD student positions available in the Institute of Physical Chemistry PAS within National Science Center Sonata Bis 7 Project No. UMO-2017/26/E/ST4/00041 entitled “MODULATION OF STABILITY OF VIRIONS – A FIGHT FOR AND AGAINST VIRUSES” (leader dr Jan Paczesny).
- **Job Description:**

The proposed project focuses on development of a toolkit for modulation of stability of virions using bacteriophages as model viruses. There is a need to unravel, understand and describe in quantitative manner how various factors influence viruses. We will focus on building the model of interactions between phage virions and electromagnetic field (Task 1) and on chemical reactions between designed linkers and proteins forming capsids (Task 2). Gained knowledge might be of interest also for other fields. Specific tasks will depend on profiles of successful candidates. The project will be conducted in collaboration with Professor Francesco Stellacci (EPFL, Switzerland).

From our experience the background in biotechnology would be appropriate, as it allows to adapt to both chemistry and biology tasks. However, applicants with other backgrounds will be also considered based on the possible input to the project (e.g. chemists, biologists, physicists, engineers or similar, not only experimentalist but also theoreticians). Candidates will need to fulfil all the requirements of IPC PAS for PhD candidates (e.g. pass the qualification exam).

Responsibilities:

 - Designing, planning and carrying out experimental work independently and under the supervision, maintaining regular research notes.
 - Scientific initiative and contribution through regular reporting and publishing, as well as presenting at group meetings, national and international conferences.
 - Providing help and supervision to junior members of the group.
 - Contribution to the efficient functioning of the lab including necessary administrative and organizational tasks.
- **Nr of positions available:** 2
- **Main Research Field:** biotechnology, chemistry or chemistry, physics and computational science
- **Sub Research Field:** Two profiles of candidates are most welcome:

- 1) experimentalists with background in bio-related science and experience in laboratory work, or
 - 2) persons who can perform experiments in silico and build models to boost understanding of processes seen in experiments.
- **Benefits:** We offer 3500 PLN per month stipend financed from the NCN Sonata Bis 7 Project No. UMO-2017/26/E/ST4/00041 and part time employment (1/4 post) financed from IPC PAS budget (around 500 PLN per month). Additionally there is a possibility of obtaining scholarship from IPC PAS according to internal rules http://ichf.edu.pl/msd/2017-09-29_stypendia_dot_stat_grant.pdf (more than 1500 PLN). The position is for a period of 44 months (funding for almost whole PhD duration). The successful candidates will be able to take advantage of all programs for PhD students in the IPC PAS, including possibility of preferential renting of room in dormitories, Young Scientist of IPC PAS competition and Mobility of Young Scientists of IPC PAS competition. Additionally all benefits of employees of IPC PAS will be granted to the successful candidate, e.g., private health care program.
 - **Comment/web site for additional job details:**
http://ichf.edu.pl/praca_doktorant.html
 - **Application Details**
 - **Envisaged Job Starting Date:** no later than November 1st, 2018, and a necessary condition is that successful candidates need to have a status of PhD student at the Institute of Physical Chemistry PAS.
 - **Application Deadline:** June 1st, 2018, 23:59
 - **How to Apply:**
Send application directly to jpaczesny@ichf.edu.pl or
Contact website-http://ichf.edu.pl/praca_doktorant.html
 - **Required Education Level (optional)**
 - **Degree:** master or equivalent
 - **Degree Field:** biotechnology, biology, chemistry, physics or related fields
 - **Required Languages:** English
 - **Language level:** good
 - **Additional Requirements**
 1. Master of Science (or equivalent) degree preferably in biotechnology, biology, chemistry, physics or related, awarded not earlier than five years before the deadline of the present recruitment.
 2. The average grade obtained in the course of study is not less than 4.3.
 3. Ability to work independently as well as in a group.
 4. Basic knowledge of rules and protocols valid in bio-labs.
 5. Knowledge on bacteriophages will be appreciated.
 6. Proficiency in English speaking and writing.
 - **Recruitment procedure**
 - The recruitment procedure has four main stages: 1) submission of the documents, 2) interview with Commission (first meeting of the Commission) for invited candidates, 3) best among them will be asked to take entry exam for the International Doctoral Studies (MSD) at the IPC PAS and 4) decision will be made by Commission during second meeting. Only candidates who got positive grade during IPC PAS entry exam will be taken into consideration. See details below:
 - 1) Complete application should include the following items: application letter, professional curriculum vitae, university degree diploma and MSc certificate, a list of

scientific achievements (publications, patents, conference presentations, etc.), at least two letters of recommendation written by academics or contacts to two individuals who can provide recommendation, and consent regarding the collection and processing of personal data (http://ichf.edu.pl/gen_inf/gen_pl/formul/Oswiadczenie-declaration_doktorant-stypendysta.doc). Application deadline is on **1st of June 2018**.

2) Top candidates will be invited (**between 2nd of June and 15th of June**) for an interview (or a conference-call). Good command of English is required. We reserve the right to contact and reply to only selected candidates.

3) The best candidates who meet the competition requirements will be invited to take an entry exam for the International Doctoral Studies (MSD) at the IPC PAS. These candidates will need to submit proper documents to IPC PAS http://ichf.edu.pl/msd/IDS_required_documents.pdf. Only persons who pass the exam for the Doctoral Studies at the IPC PAS with a positive grade, are going to be eligible candidates. The exam will be held on **June 29th, 2018**. A description of the course of study can be found at: <http://ichf.edu.pl/msd/>. The candidates, who are already enrolled in MSD program at the IPC PAS do not need to retake the entry exam.

4) After the positively passed exam of the PhD Studies at the Polish Academy of Sciences, the Commission will decide to award the scholarship and the results of the recruitment will be announced on **July 3st, 2018**.

- The scholarship will be awarded in accordance with the NCN regulations: „Regulamin przyznawania stypendiów naukowych w projektach badawczych finansowanych ze środków narodowego centrum nauki” https://ncn.gov.pl/sites/default/files/pliki/uchwaly-rady/2016/uchwala96_2016-zal1.pdf

- The Commission will take into account the following criteria:

- a) competences of candidates for specific tasks in a research project,
- b) previous scientific achievements of candidates,
- c) awards and distinctions of the candidate resulting from the conducted research.

- The commission evaluates applications on a point scale.

- A scholarship will be awarded to the person who obtains the highest number of points.

- The results of the competition are made public.

- Scheduled starting date of work within the Project is **no later than November 1st, 2018**, and the necessary condition is that successful candidates need to have the status of PhD student at the Institute of Physical Chemistry PAS before starting work within the Project.

ZASTĘPCA DYREKTORA

d/s Naukowych



Prof. dr hab. Marek Tkacz