PhD student scholarship in microfluidics

Position in the project: PhD student, starting from 01.10.2024
Scientific discipline: microfluidics, biophysics, optics, engineering,
Stipend amount/month: **4000-5000 PLN net**; after successful application to the Doctoral School scholarship is increased to **7700 PLN net (~1500 EUR)** in years 1-2 and **8700 PLN net** in years 3-4
Period of stipend agreement: 48 months
Institution: The University of Warsaw, Faculty of Biology / Warsaw, Poland
Project leader: Dr Tomasz Kaminski
Project title: Ultrahigh throughput studies of microbial consortia with DNA barcoding and droplet microfluidics.
Project description: **https://www.ncn.gov.pl/sites/default/files/listy-rankingowe/2023-06-15-lut7739ikitila/streszczenia/595999-en.pdf**

Key responsibilities:

1. Experimental work:
   a) Setting up automated optofluidic systems for high throughput bacteria encapsulation, picoinjection and droplet sorting (e.g. doi/full/10.1021/acs.analchem.2c04144).
   b) Development of new microfluidic technologies – specifically multimodal droplet sorters (e.g. doi/full/10.1002/admt.202101053) and systems for optical barcoding of droplets (e.g. doi/10.1002/adom.202302564?af=R).
   c) Execution of experiments with screening of microbial consortia
2. Analysis and publication of the obtained results, participation in the preparation of patent applications, and potential commercialization of the research results
3. Participation in seminars and scientific conferences.
4. Optional supervision of undergraduate students involved in research work in the project.

The successful candidate is expected to enroll in the Doctoral School of the University of Warsaw https://szkolydoktorskie.uw.edu.pl/en/

Profile of a candidate/requirements:

1. Master's degree in physics, biophysics, engineering, analytical chemistry or related fields (the diploma should be obtained before September 2024).
2. Working knowledge about spectroscopy, laser systems and laboratory automation.
3. Experience in building experimental customized optical setups.
4. Knowledge of programming (e.g. LabView, Matlab, Python).
5. Experience in microfluidics is a plus.
6. Very good knowledge of English.
7. Willingness to gain new expertise.

Required documents:

1. Short motivation letter
2. Curriculum vitae including: a detailed description of the academic degrees, titles of theses, names and affiliations of supervisors, places of employment, list of scientific publications, conferences, awards and trainings.
3. Address details of at least one direct supervisor/scientist who may recommend the given candidate.
4. Copies of obtained diplomas.
5. For the purpose of the recruitment process, please attach a scan of signed, written permission for recruitment-related personal data processing, which states: *„I give permission to the University of Warsaw, registered at the address of ul. Krakowskie Przedmieście 26/28, 00-927 Warszawa, to process my personal data for the purposes of carrying out the recruitment*

procedure, choosing the employee, and entering into an employment contract with the University of Warsaw, if applicable. I have been informed about my legal rights and obligations in relation to these actions. I acknowledge that providing the aforementioned personal data is done by me on a voluntary basis."

In case of any questions regarding recruitment, candidates are encouraged to contact the project leader **ts.kaminski2@uw.edu.pl**

Please submit the following documents preferably in one PDF by e-mail to ts.kaminski2@uw.edu.pl; with the annotation "**SonataBis_Microfluidics_PhD_2024"**

Application deadline: 03.06.2024
For more details about the position, please visit:

- Lab website: **https://microfluidicsuw.com/**