



Institute of Physics of the Polish Academy of Sciences

Scholarship for a PhD Student



Job ID: #JOB 35/2020

Job Description

Job Title: PhD student

Job Summary: Droplet dynamics phenomena, such as droplet coalescence and break-up, are ubiquitous and play an important role in many industrial areas (e.g. spraying). The planned research tasks in the frame of a Sonata Bis project will involve multiscale computer simulation methods to investigate the break-up process of droplets laden with various additives, which will allow for a greater control of droplet dynamics towards optimizing technological processes. The obtained results will enable a better understanding of droplet dynamics and its control by investigating various parameters.

Job Description:

The PhD student will be involved in the research tasks of the above topic and will work closely with other researchers of the Sonata Bis project headed by dr Theodorakis. This includes travel to Tianjin University where relevant experiments will take place. They will also have further opportunity to interact with the European consortium ThermaSMART (<https://thermasmart.eng.ed.ac.uk>), and to take advantage of associated training opportunities. The applicant is obliged to apply to the Warsaw PhD School in Natural and BioMedical Sciences (Warsaw-4-PhD) at the Institute of Physics of the Polish Academy of Sciences in 2020. For more information please refer to the IP-PAS international PhD studies web pages at: http://www.ifpan.edu.pl/t_en_szkola.html and <http://warsaw4phd.eu>.

Requirements:

- Master's degree in Natural Sciences or Engineering
- Good knowledge of a programming language (e.g. Python, C, C++)
- Good analytical skills
- Experience in simulation or numerical work
- Ability to work as a team and effectively communicate
- To be employed, the candidate must be accepted into the PhD school in which the Institute of Physics participates. Applications for the position are through recruitment to the School, online at <http://warsaw4phd.eu>

Main research field: Physics

Sub Research Field: Fluid Dynamics

Career Stage: Early stage researcher or 0-4 yrs (Post-graduate)

Research Profile ([details](#)): First Stage Researcher (R1)

Type of Contract: Fixed term (48 months with possible extension for another 6 months)

Status: full-time

Salary: 5000 PLN per month (grant funding, before obligatory employer and employee social security contributions)

Contact

More information can be obtained from

Dr Panagiotis Theodorakis (e-mail: panos@ifpan.edu.pl)

Application details

Application deadline: 18.8.2020 Later applications will not be considered.

Required materials:

- Scientific CV
- Cover letter
- Scan of MSc diploma or equivalent (or an explanation of when one is expected)
- Academic record (for finalized semesters)
- Recommended: A recommendation letter by an academic, or their contact email.

All materials should be submitted in electronic form by application to the PhD school <http://warsaw4phd.eu>, choosing the project: "*Multiscale Simulation of Break-up droplet dynamics*". (The application system will be active from 5 August 2020).

Results regarding the position will be made available by 18 September 2020.
