



Institute of Physics of the Polish Academy of Sciences Scholarship for a PhD Student



Job ID: #JOB60/2020

Job Description

Job Title: PhD student – scholarship holder

Job Summary:

Layered magnetic structures with tuneable anisotropy and Dzyaloshinskii-Moriya interaction studied by ab-initio simulations (theoretical)

Job Description:

The PhD student will perform relativistic ab-initio calculations using codes appropriate to study the interface effects in layered magnetic structures. We will extract microscopic effective parameters, such as anisotropy, magnetic exchange and Dzyaloshinskii-Moriya interaction and use them to elucidate the role of various mechanisms and the stability of the numerous magnetic phases. Furthermore, there will be a strong connection between the theoretical studies and experimental teams.

Requirements:

MSc in physics (or an equivalent that qualifies one for PhD studies in physics in the country of issue) is required. To perform the numerical simulations we will use modern supercomputers. The project requires a willingness to learn numerical skills which we will gladly help you with. Proficiency in spoken and written English is required. Prior experience in density functional theory (DFT) is highly desired but not required. Experience in experimental work will be also an advantage.

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 warsaw4phd.eu.

Main research field: Physics

Sub Research Field: solid state magnetism

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)

Status: Full-time

Salary: grant funding of 5000 PLN per month, before subtracting obligatory employer and employee social security contributions (~15%).

Contact

More information can be obtained from:

Andrzej Wawro (e-mail: wawro@ifpan.edu.pl)

<http://www.ifpan.edu.pl/~wawro/>

Please make contact.

Application details

Application deadline: 06.01.2021; 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 warsaw4phd.eu, choosing the project: "*Layered magnetic structures with tuneable anisotropy and Dzyaloshinskii-Moriya interaction studied by ab-initio simulations*".

(The application system will be active from 22 December 2020).

Results regarding the position will be made available by 10 February 2021.