

The competition for doctoral scholarship project PRELUDIUM BIS

Project title: *Studies on the physical properties of the thin-film metal/PtSe₂ interfaces*

Project leader: Dr. Wojciech Koczorowski

Number of positions: 1

Unit: Poznań University of Technology,
Faculty of Materials Engineering and Technical Physics,
Institute of Physics

<http://phys.put.poznan.pl/>

City: Poznań

Requirements:

- knowledge of: surface physics, solid state physics
- experience in the design and operation of vacuum systems
- experience in experimental work
- Knowledge of techniques of experimental surface physics
- good knowledge of programming environments used during data measurement and analysis (LabVIEW, Mathematica)
- good knowledge on CAD software
- good knowledge of English (spoken and written)
- a M. Sc. degree (or equivalent) in physics, technical physics, chemistry

When starting work under the project and receiving a scholarship, the candidate will be admitted to the Doctoral School at the Poznań University of Technology.

Description of tasks:

Research works will be carried out mainly at the Faculty of Materials Science and Technical Physics, Poznan University of Technology under the above mentioned Preludium Bis project.

The main research problem of the project concerns electrical and structural characterizations of transition metal/2D-material interfaces, in particular PtSe₂ containing junctions.

The student will be responsible for the experimental part of the project. Characterization using a wide range of techniques will be carried out by the student, including: interface morphology studies using AFM, CLSM, SEM/EDS techniques. Determining the electrical parameters of the interfaces will be carried out using the TLM and Hall effect measurements methods on previously fabricated surface structures. The student will also be responsible for data processing and interpretation.

Project type: NCN: Preludium Bis, ST

Application submission deadline: 15.07.2020

Application form e-mail: wojciech.koczorowski@put.poznan.pl

Employment conditions:

- scholarship duration: 48 months, starting from: 01.10.2020
- scholarship: PLN 5,000 before evaluation, PLN 6,000 after evaluation (the amount may include public and legal burdens in accordance with applicable laws regulations)
- the scholarship is granted in accordance with the rules contained in the granting of scholarships in research projects regulations financed by the National Science Centre (NCN) introduced by the Resolution of the NCN's Council No. 25/2019 of March 14th, 2019

- the student will be required to realization the 4-month foreign research internship financed by the National Agency for Academic Exchange (NAWA) in 2023 at Innovations for High Performance Microelectronics (IHP), requiring additional application

Additional information:

The application should contain:

- 1) cover letter
- 2) Scientific CV
- 3) summary of the M. Sc. thesis
- 4) copies of obtained diplomas
- 5) opinion of the M. Sc. thesis supervisor

Only Selected candidates will be informed individually about the interview date. The applications will be evaluated by a three-person commission. The competition will be settled by August 31st, 2020. In case of resignation of the candidate, the commission indicates the next candidate from the ranking list.

Information clause:

In accordance with Art. 13 of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of individuals with regard to the processing of personal data and on the free movement of such data and repealing Directive 95/46 /EC (hereinafter referred to as GDPR) we inform that:

1. The administrator of your personal data is Poznan University of Technology located at Pl. Marii Skłodowskiej - Curie 5, 60-965 Poznań e-mail: biuro.rektora@put.poznan.pl, phone: 61 665 3639.
2. Contact details of the Data Protection Inspector - Piotr Otomański, e-mail: iod@put.poznan.pl,
3. Your personal data will be processed in order to carry out the recruitment process; the legal basis for the processing of your personal data is voluntarily and knowingly expressed by your consent according to art. 6 section 1 (b) GDPR.
4. Personal data will not be passed on to processing entities (art. 28 section 1 GDPR). They can be only transferred only to bodies authorized by law.
5. Personal data will be kept for the period of the recruitment process or until you withdraw your prior consent, but its withdrawal does not affect the legality of the processing which was carried out on the basis of consent before its withdrawal.
6. You have the right to access your personal data, the right to rectify them, the right to transfer them, and if applicable, also to remove them, to limit processing and the right to object to processing.
7. You have the right to lodge a complaint with the President of the Office for Personal Data Protection when you feel that the processing of your personal data violates the provisions of the General Data Protection Regulation of 27 April 2016 (GDPR).
8. Providing by you your personal data is voluntary, however, the consequence of not providing personal data may lead to inability to consider your candidacy for a vacancy.
9. Your data will not be processed in an automated way, including profiling.