



Institute of Physics of the Polish Academy of Sciences

Scholarship for a PhD Student



Job ID: #JOB13/2018

Job Description

Job Title: PhD student in electron microscopy of semiconductors nanostructures

Job Summary:

Experimental investigation of local structure and properties of semiconductor hetero-nanocrystals by advance Transmission Electron Microscopy (TEM) methods.

Job Description:

The PhD student will participate in research devoted to determination of the nanoscale deformation of the crystalline lattice of individual strained semiconductor hetero-nanowires and relationships between their atomic structure and properties using the advance electron microscopy techniques as nano-beam electron diffraction (NBD), HRTEM, STEM, EELS, XEDS. Experimental results will be confronted with TEM diffraction/images simulations based on realistic model of strained nanowire. Investigation will be performed in the frame of NCN grant UMO-2016/21/B/ST5/03411. The performed work will be the basis for doctoral thesis.

Profile of a candidate for the position:

- MSc university degree in one of the following disciplines: physics, applied mathematics, material science, chemistry, computational physics, obtained after 1th January of 2014,
- high motivation for scientific work
- ability to work in a team,
- analytical thinking, diligence in work,
- an additional advantage will be programming skills in one of C ++, Python, Matlab, Matematica
- good spoken and written English.

The successful candidate will be participate in International PhD Studies at IP PAS
http://info.ifpan.edu.pl/msdifpan/Studium/index_en.htm

More information about laboratory :

<http://www.ifpan.edu.pl/SL-1/index.html>

<http://www.wkraj.pl/index.php?page=vr&start=50464#/50464/0>

Main research field: Physics

Sub Research Field: Solid state physics

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

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

Type of Contract: Temporary for the 30 month term

Status: Full-time

Salary: 3000 PLN per month (untaxed scholarship).

Contact

More information can be obtained from
dr hab.Sławomir Kret (e-mail: kret@ifpan.edu.pl , tel. (48) 22 116 3382
https://www.researchgate.net/profile/Slawomir_Kret).

Application details

Application deadline: March 19 2018. Later applications may also be considered.

Required materials:

- Curriculum Vitae
 - List of publications
not obligatory (published/accepted/send reserch papers or/and, list of conference presentations)
 - Letter of motivation related to proposed specifique topic of reserch proved the candidate's basic knowledge of topics related to crystallography and properties of semiconductor heterostructures
 - Declaration on the ability to take up employment within a period of not more than 4 weeks from the announcement of the result of the competition.
 - Transcript of record from undergraduate studies
 - Due to the necessity of immediate employment at the proposed position, the candidate must present a master's degree awarded by Polish universities or an equivalent document of a foreign university in a given discipline in accordance with the requirements of the Ministry of Science and Higher Education <http://www.go-poland.pl/recognition-degrees-0>
 - Reference contact person(s) (with phone number(s) and e-mail address(es))
- The top candidat will be granted for position. In case of resignation of top ranked candidat, the next person from the ranking list can be selected. We reserve the right to cancel the competition without giving a reason .

All materials should be submitted in electronic form to the address: jobs@ifpan.edu.pl with Job ID in the subject.