



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



**Job ID:** #JOB25/2018

## Job Description

**Job Title:** PhD student in experimental condensed matter physics

**Job Summary:**

SEM studies of nitride semiconductor nanostructures, cathodoluminescence and EBIC experiments

**Job Description:**

The student will be involved in realisation of the project devoted to MBE growth and submicron imaging of local electronic and optical processes in nitride semiconductor nanostructures. The project includes a wide range of basic research, from the physics and chemistry of nanowire growth to distribution of elementary excitations in nanowires of complex structure (e.g. with built-in heterostructures), energy transfer in the structure, defect distribution and surface passivation processes, band structure engineering by formation of solid solutions, intentional use or elimination of the electric fields in the nitride heterostructures or inducing strains due to lattice constant mismatch.

Profile of a candidate for the position:

- master science degree in physics of semiconductors or similar
- due to specific experimental work to be performed experience and knowledge (documented by publications) in the subject of the project are required; experience in scanning electron microscopy and related experimental methods (CL, EBIC) would be an asset
- very good spoken and written English.

**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 24 months

**Status:** Full-time

**Salary:** From 2500 to 2500 PLN per month (untaxed scholarship).

## Contact

More information can be obtained from prof. B.J. Kowalski (e-mail: [kowab@ifpan.edu.pl](mailto:kowab@ifpan.edu.pl)).

(Add additional information if needed. Otherwise leave empty.)

## Application details

**Application deadline:** 24.06.2018 Later applications may also be considered.

**Required materials:**

- Curriculum Vitae

- List of publications

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