



# Institute of Physics of the Polish Academy of Sciences

## Scholarship for a PhD Student

**Job ID:** #JOB11/2016



### Job Description

**Job Title:** PhD Student

**Job Summary:**

The PhD student will participate in the project “Nonequilibrium bosonic gases in semiconductors under the influence of external fields”, devoted to theoretical research on solid state physics and quantum optics, including condensation of Bose-Einstein of exciton-polaritons. The project is realized in collaboration with the experimental group from the University of Warsaw and leading foreign groups.

**Job Description:**

Bose-Einstein condensate is a state of matter in which particles are in an exotic quantum state, forming a macroscopic "wave of the matter". In 2006 condensation of exciton-polaritons, or quasiparticles composed of photons, electrons and holes was demonstrated for the first time, thereby creating interesting opportunities for the application of this concept in many fields, such as highly accurate interferometric measurements, or information processing with very little energy loss.

Profile of a candidate for the PhD position:

- Master degree in Physics or related field,
- research experience in related field, ideally proven by publications,
- numerical modeling and programming skills,
- good spoken and written English.

We offer:

- participation in research in a new and rapidly developing field of physics,
- possibility to publish in the most prestigious scientific journals,
- participation in international collaborations and scientific conferences,
- friendly work environment.

**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 three year term

**Status:** Full-time

**Salary:** 3000 PLN per month (untaxed scholarship).

## Contact

More information can be found at [www.ifpan.edu.pl/polariton](http://www.ifpan.edu.pl/polariton) and from dr hab. Michał Matuszewski (e-mail: [mmatu@ifpan.edu.pl](mailto:mmatu@ifpan.edu.pl)).

## Application details

**Application deadline:** June 19, 2016 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.