

FORM FOR EMPLOYERS

INSTITUTION Institute of Physics of the Polish Academy of Sciences

CITY Warsaw

POSITION Research Assistant and Phd Candidate #JOB 27/2026

DISCIPLINE Condensed matter physics, Nanotechnology, Superconductivity

POSTED 24.08.2026

EXPIRES 22.09.2026 r

WEBSITE

https://www.ifpan.edu.pl/images/instytut/Oferty_pracy_i_konkursy/2026/2026-08-24_Asystem_027-2026_EN.pdf

KEY WORDS Condensed matter physics, Nanotechnology, Superconductivity, Assistant, Phd Candidate

DESCRIPTION (field, expectations, comments):

Job Summary:

The winning candidate will work as a $\frac{3}{4}$ full-time research assistant in the Functional Superconductivity Group at the International Centre for Interfacing Magnetism and Superconductivity with Topological Matter - MagTop of the Institute of Physics of the Polish Academy of Sciences, and will prepare a doctoral thesis in extramural mode, attending lectures at the Warsaw-4-PhD Doctoral School.

Job Description:

Background: In the Functional Superconductivity Group, we are building and testing pioneering

low-temperature functional nanostructures with a special emphasis on superconducting devices containing topological vortices. Our expertise includes fast, time-resolved thermometry

of nanostructures by probing Josephson junctions with short current pulses and by using vortex

electronics. It involves building nanodevices that control and manipulate superconducting vortices to enable new functionalities, e.g., memory cells and logical elements for quantum

computing [1].

[1] see our paper, M. Foltyn, et al., Science Advances 10, eado4032 (2024).

Aim: Conducting experimental or theoretical research in the Functional Superconductivity Group in cooperation with other experimental and theoretical groups at the MagTop Center

and with the top groups abroad, leading to a PhD degree.

Requirements:

- a Master's degree in physics, experimental or theoretical (or an equivalent that qualifies one

- for PhD studies in physics in the country of issue),

- experience in low-temperature measurements would be an advantage,

- or prior experience with superconductivity theory would be an advantage

- knowledge of English

Main research field: Physics

Sub Research Field: Condensed matter physics, Nanotechnology, Superconductivity

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

Research Profile (details): First Stage Researcher (R1)

Type of Contract: Initial employment for a fixed term of 24 months, including a 3-month probationary period. Prolongation of employment until May 31, 2029 (end of the project) will be based on performance and successful completion of a mid-term evaluation performed at a level

analogous to that in the PhD school. The doctorate will be pursued extracurricularly.

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Status: Part -time employee hired at $\frac{3}{4}$ of a full-time contract

Salary: The person will be employed as a research assistant in a $\frac{3}{4}$ full-time position (with all

employee benefits and an additional medical insurance package) with a gross salary of PLN

7404,75 per month, which is approximately PLN 5560 net/month (1280 EUR). The MagTop project

(FENG.02.01-IP.05-0028/23) is implemented as part of the MAB FENG action of the Foundation

for Polish Science, co-financed by the European Union from the 2nd Priority funds of the Programme European Funds for Smart Economy 2021-2027 (FENG).

Contact

More information can be obtained from open_positions@MagTop.ifpan.edu.pl

or from the group leader zgirski@MagTop.ifpan.edu.pl

Application deadline: 22.09.2026.

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 (an academic transcript for all semesters completed to date, including grades obtained during Bachelor's and Master's studies in physics, materials science, or related fields)
- Recommended: A recommendation letter by an academic, or their contact email,
- Consent to process your personal data (expressed on the attached form)

For legal reasons we will not be able to process your application without this!

All required materials for the position must be sent in electronic form to

open_positions@MagTop.ifpan.edu.pl and rekrutacja@ifpan.edu.pl with the Job ID# as a subject.

We encourage people with disabilities to apply. We provide friendly working conditions.

The Institute of Physics of the Polish Academy of Sciences has Rules for Internal Reports specifying the procedure for

reporting violations of law and taking follow-up actions, which can be found on the Institute's website at the link:

<https://www.ifpan.edu.pl/en/institute/internal-reports-concerning-violations-of-law.html>