



OPEN POSITION

Job ID: #JOB 64/2020

Job Description

Job Title: Post-doc in spectroscopy of colloidal nanocrystals

Job Summary:

We are looking for one PostDoctoral scientist to carry out **spectroscopic studies on colloidal nanocrystals**. The successful candidate will be involved in steady-state and time-resolved absorption and photoluminescence measurements. While part of the work will be devoted to studies of colloidal ensembles, the main focus will be placed on the spectroscopy of **single nanostructures**. The candidate will join a **young team** of researchers investigating optical properties of **ternary I-III-VI compound nanocrystals** — cadmium-free, less toxic alternatives to well known cadmium chalcogenide nanocrystals. The project is aimed at revealing the mechanism of light emission in these nanostructures and applying them to photovoltaic devices.

Job Description:

The successful candidate will join the group of Łukasz Kłopotowski working on various colloidal nanostructure systems. The candidate will perform transient absorption and time-resolved photoluminescence (PL) studies on nanocrystal colloids and films of such materials as CuInS_2 , AgInS_2 , CuAlS_2 , their alloys, and related compounds. These experiments will allow to optimize the experimental conditions, nanocrystal architecture, and sample environment to achieve a sufficiently high PL quantum yield for single nanocrystal studies. As the ultimate goal, the candidate will perform studies of single nanocrystal PL spectra and their temperature dependence, and investigate PL blinking characteristics. Analysis of the results will require familiarity with Origin software and programming in Python. Ability to model PL dynamics within Monte-Carlo methods will be an additional asset.

The successful candidate will hold a PhD degree in physics, chemistry, or a related field. She/he will be expected to undertake new challenges requiring excellent team working skills. Good communication skills in English, written and spoken, are a must. The candidate will have experience in spectroscopy of nanostructures proven by relevant publications. As a part of the evaluation process, during an on-line interview, the candidate will be asked to solve simple assignments related to the forthcoming experimental tasks.

We offer a friendly and stable working environment with a possibility to develop the candidate's own career path either within the Polish scientific community or abroad. Our expertise in sample fabrication, nanocrystal spectroscopy, and single nanostructure studies is evidenced by our list of publications. The synergy within our research team and the candidate's diligence will allow her/him to thrive.

For more information on the PI, the team, and the research project, visit klotowski.com/physics.

Main research field: Physics

Sub Research Field: Chemical Physics

Career Stage: Post-Doc, the degree obtained not earlier than 7 year prior

Research Profile ([details](#)): Recognised Researcher (R2)

Type of Contract: 18 months.

Status: Full time employment

Salary: 10 000 PLN per month (before taxes, including obligatory taxes paid by employer).

Contact

More information can be obtained from **Łukasz Kłopotowski** (e-mail: lukasz.klopotoski@ifpan.edu.pl).

Application details

Application deadline: January 15th, 2021, 12:00 pm (noon) CET.

Required materials:

- Curriculum Vitae
- List of publications
- Motivation/cover letter
- Two e-mail addresses to scientists willing to provide reference letters
- Consent to process candidate's personal data

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

DATA PROCESSING UNDER CONSENT FOR THE PURPOSES OF RECRUITMENT

Under Art. 13 sections 1 and 2 of the Regulation of the European Parliament and of the Council (EU) 2016/679 of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Resolution), EU OJ L 119 of 04.05.2016, page 1, as amended, hereinafter referred to as "GDPR", we hereby inform as follows:

1. The Data Controller of the provided personal data is the Institute of Physics of the Polish Academy of Sciences, Al. Lotników 32/46, 02-668 Warsaw, phone (22) 116-2111, e-mail director@ifpan.edu.pl.
2. Contact details to the Data Protection Officer are as follows: e-mail iodo@ifpan.edu.pl
3. Your personal data shall be processed for the purpose of carrying out the recruitment process for the position of Post-Doc.
4. Processing of your personal data in scope of: full name, date of birth, correspondence address, information about education and course of past employment shall take place under Art. 22¹ § 1 of the Act of 26 June 1974 - Labour Code. In the scope in which you sent to us more personal data than indicated above, we process your data under the consent granted by you.
5. Your personal data shall be stored for 1 month from completion of the recruitment process. If you grant consent for processing of personal data for future recruitments, we shall process your data until withdrawal of the consent by you, however, no longer than for the period of 6 months from the day of submittal of the application by you.
6. Provision of the abovementioned data in the scope indicated above is a statutory requirement resulting from Art. 22¹ § 1 of the Act of 26 June 1974 - Labour Code, in the remaining scope it is voluntary. Failure to provide the data referred to in Art. 22¹ § 1 of the Act of 26 June 1974 - Labour Code precludes consideration of your candidacy for the offered position.
7. You have the right to access your personal data, to rectify them, erase them, restrict their processing.
8. You may submit a complaint to the Inspector General for the Protection of Personal Data.
9. You have the right to withdraw the consent to process your personal data in the scope in which they were provided at any time. Withdrawing the consent does not affect the lawfulness of processing carried out on the basis of consent before its withdrawal.

Consent content:

I grant my consent to the Institute of Physics of the Polish Academy of Sciences to process my personal data contained in the sent recruitment documents for the purpose of carrying out the recruitment process for the position of Post-Doc .

If you want us to consider your candidacy also in the future recruitment processes, please grant the additional consent:

I grant my consent to the Institute of Physics of the Polish Academy of Sciences to process my personal data contained in the sent recruitment documents in future recruitment processes taking place during 6 months from the day of appearance of this job advertisement.