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Call for Applications

The Laboratory of Organic Nanomaterials is seeking a PhD student for a position within the First Team project funded by the Foundation for Polish Science, titled: "Bi-chiral sources of circularly polarized light (BCP-LED)" led by Dr. hab. Wiktor Lewandowski, University Professor.

Project Description:

The main goal of the project is to develop new nanomaterials with chiral structures. These materials will be used in the fabrication of advanced electroluminescent devices. By selecting appropriate components (nanoparticles, polymers) and implementing an innovative pixelation method, the project aims to overcome the limitations of current photonic devices and develop bi-chiral sources of circularly polarized light. Project partners: Prof. Luis Liz-Marzan (CICbiomaGUNE, Spain), Prof. Matthew Fuchter (Imperial College London, UK).

Responsibilities:

- Synthesis of semiconductor nanocrystals (quantum dots, QDs) free of toxic heavy metals to serve as energy acceptors from polymers (via resonance energy transfer);
- Synthesis of CsPbX₃ perovskite nanocrystals and control of surface ligands on the resulting nanoparticles;
- Characterization of the physicochemical properties of the synthesized nanomaterials (structural analysis, spectroscopic analysis of luminescent properties), data analysis, and preparation of results for publication;
- Co-authorship of scientific articles and publication of research findings.

Candidate Requirements:

- Current status as a PhD student or successful admission to the Doctoral School of Exact and Natural Sciences for the academic year 2025/2026;
- Laboratory experience in nanomaterials synthesis;
- Knowledge of fluorescence spectroscopy and electron microscopy is an asset;
- Proficiency in English (spoken and written).

We Offer:

- Training in various techniques related to nanomaterials (synthesis, characterization);
- Professional development opportunities including courses, international internships with project partners, and participation in scientific conferences;
- PhD scholarship: 4500 PLN/month;
- Employment duration: 12 months, with a possibility of extension;
- Start date: October 1, 2025.

Required Documents:

- CV
- Motivation letter
- https://bsp.adm.uw.edu.pl/wp-content/uploads/sites/18/2020/07/Klauzula-informacyjna-przy-rekrutacji-do-pracy_11_2019-1.docx



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Application Deadline and Procedure:

Please send the application documents to: wlewandowski@chem.uw.edu.pl by September 5, 2025. Selected candidates will be invited for an interview within a week after the deadline.

More information about the recruitment: www.nanoorgmat.chem.uw.edu.pl

In accordance with the Act of June 14, 2024, on whistleblower protection, the University of Warsaw has adopted an internal procedure for reporting legal violations and taking follow-up actions – published as an annex to Order No. 94 of the Rector of the University of Warsaw dated September 17, 2024, and available in the University Monitor 2024, item 266.



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