

Post-doctoral position in polymer or hybrid systems quantum photonics

Job Information

Organisation/Company

Institute of Solid State Physics, University of Latvia

Research Field

Physics » Optics Physics Physics » Solid state physics

Researcher Profile

Recognised Researcher (R2)

Country

Latvia

Application Deadline

08 May 2023

Type of Contract

Temporary

Job Status

Full-time

Offer Starting Date

1 Sep 2023

Offer Description

The Latvian Quantum initiative (LQI) is a partnership between leading academic institutions in Latvia recognized for research excellence in specific domains of quantum technologies. The initiative has been granted dedicated funding for development of research potential in quantum technologies, leveraging synergies between participating labs.

Within this initiative, we are seeking to appoint a post-doctoral researcher who will be responsible for developing quantum photonic integrated chips and has a competence in the quantum photonics area. The applicant will join the research and academic environment of Institute of Solid State Physics [<https://www.cfi.lu.lv/en/>] in collaboration with Quantum Optics Laboratory of University of Latvia will work on development of integrated quantum photonics with focus on single-photon sources, frequency conversion and single photon detectors.

The future holder of this position will be working on developing integrated quantum photonics based on polymer-hybrid photonic platform. Institute of Solid State Physics hosts a large cleanroom facility with all the necessary equipment for optical and electron-beam lithography and experienced staff [<https://www.cfi.lu.lv/en/research/nanotechnology-center/>]. Quantum Optics Laboratory has experience regarding photonic device characterization with focus on frequency combs and sensors based on ring-resonators.

Requirements

Research Field

Physics » Optics

Education Level

PhD or equivalent

Skills/Qualifications

The position holder should have research experience in quantum photonics from experimental point of view. It covers experience in lithography methods, fabrication of micro and nano optical structures and investigation of their properties.

In addition to the research it is expected that applicant will work on further development of the polymer quantum optics field through leading a scientific team and joint research projects with other scientific teams from Latvian institutions. The candidate will also contribute to the development of courses in condensed matter physics and photonics.

Specific Requirements

Profile:

- Record of relevant research regarding integrated quantum photonics,
- Basic knowledge of lithography workflows (optical and electron-beam lithography)
- Experience in project preparation and submission

Responsibilities:

- Publication of scientific papers,
- Submission of scientific projects,
- Leading scientific team of students.

Additional Information

Curriculum Vitae including teaching competence, list of the most relevant published works and details of lead projects (scope, financing).

Fulfilling the conditions specified in the European Framework for Research Careers for Established researcher at the level of R2 or R3.

Competitive salary *starting from* 3000 EUR/month and social benefits.

Work Location

Number of offers available

1

Company/Institute

Institute of Solid State Physics, University of Latvia

Country

Latvia

State/Province

Riga

Postal Code

LV-1063

Street

Kengaraga iela 8

Where to apply**E-mail**quantumlatvia@lu.lv

Please include reference "Post-doctoral position - photonics" in your application e-mail.