Principal investigator in experimental condensed matter physics: quantum transport in nanoelectronic devices

Job Information

Organisation/Company
University of Latvia, Department of Physics
Research Field
Physics » Condensed matter
Researcher Profile
Leading Researcher (R4)
Country
Latvia
Application Deadline
08 May 2023
Type of Contract
Permanent
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. LQI is part of the European Network of National Quantum initiatives and is led by profs. Andris Ambainis and Vyacheslavs Kashcheyevs.

Within this initiative, we are seeking to appoint leading researcher who will be in charge of developing competitive experimental research direction in the area of quantum materials and nanoelectronic devices, focusing on, but not limited to topological insulators and their architectures with 2D materials, combining phenomenology of new materials and superconductivity at the meso and nanoscale.

The applicant will join the research and academic environment of the University of Latvia Institute of Chemical Physics, and Department of Physics institution and will have access to state of the art Nanotechnology center facilities at the Institute of Solid State Physics [https://www.cfi.lu.lv/en/research/nanotechnology-center/].

The future holder of this position is an established researcher in the field of condensed matter physics and has hands-on experience in instrumentation of cryogenic equipment, quantum transport of low dimensional systems / nanoelectronic devices at low temperatures.

The applicant will be expected to complement the ongoing research activities at the University of Latvia and develop them further, in terms of joint research projects and by attracting third-party funding, and to build a research group, strengthening the experimental condensed matter physics at University of Latvia. The candidate will contribute in development of courses in condensed matter physics and nanoelectronic devices, and the position includes a teaching component in the research area.

Requirements

Research Field

Physics » Condensed matter properties

Education Level

PhD or equivalent

Skills/Qualifications

- Research and publication track record in the field
- Experience in attracting research funding
- International visibility (network of international collaborations, participation in research
- programmes)
- Knowledge of nanofabrication and instrumentation of cryogenics
- Experience in teaching is a bonus

Specific Requirements

- Curriculum Vitae including teaching competence, list of the most relevant published works and details of lead projects (scope, financing).
- Research plan (max. 5 pages) describing the future research activities to be developed at the University of Latvia Department of Physics; Institute of Chemical Physics.
- Contact information for two references.

Work Location / Contact

Company/Institute

University of Latvia, Department of Physics; Institute of Chemical Physics
https://www.akademiskaiscentrs.lu.lv/en/
https://www.fmof.lu.lv/en/
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Where to apply

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