



Olomouc 04.09.2024

The Dean of the Faculty of Science announces a selection procedure for the job position of

Postdoctoral research fellow with focus on hybrid quantum systems

Research Field: Hybrid quantum systems
Number of Posts: 1
Researcher Profile: Recognised Researcher (R2)
Programme/Project name: OP JAK QUEENTEC
Department/Facility: Department of Optics
Type of contract: Fixed-term contracts
Job Status: Full-time
Hours per Week: 40
Location: 17. listopadu 12, Olomouc
Offer Starting Date: 01.11.2024

Department/Facility description

<https://optics.upol.cz/en/>

Job Profile

As part of the work package WP3 of the OP JAK QUEENTEC project, the postdoctoral researcher will be involved in the design and analysis of hybrid quantum systems comprising superconducting circuits, levitated nanoparticles, and trapped ions and their applications in quantum technologies. The aim of this work is to develop protocols for nonlinear control of nanoparticle motion using superconducting circuits and its use for frequency conversion between microwaves and light and the use of trapped ions as quantum memories for superconducting circuits.

The postdoc will collaborate with the theoretical team at the Department of Optics, Faculty of Science UP, led by prof. Radim Filip and Dr. Ondřej Černotík and with experimental team at the Institute of Scientific Instruments of the Czech Academy of Sciences in Brno involved in the QUEENTEC project. The mentor of the postdoctoral researcher will be Dr. Ondřej Černotík.

Requirements

- Ph.D. in Physics
- Specialization in quantum optics and quantum technologies with focus on superconducting devices, optomechanics, or trapped ions
- Publication track record in quantum optics and quantum technologies with focus on superconducting devices, optomechanics, or trapped ions
- Ability to communicate in English

What we offer

- Reliable employer
- State-of-the-art equipment for teaching and research
- Professional development opportunities
- 30 days of vacation
- Meal allowance, canteen meals or meal vouchers
- Other benefits
- Workplace within easy reach of public transport, parking available



- Fixed-term contract for 12 months with the possibility of further extension

Documents requested

CV in English

Scan of Diploma

Academic record track over the last 5 years

If you are interested in this position, please, fill in the contact form and attached the requested documents no later than 05.10.2024.

Contact person

Černotík Ondřej, Ph.D., ondrej.cernotik@upol.cz, +420 585 634 241

Additional Information

The Palacký University reserves the right not to fill the position in an exceptional case without giving any reason or to cancel the selection procedure.