



Olomouc 07.02.2024

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

## **Postdoctoral research fellow with focus on quantum control**

Research Field: Quantum control in nonlinear and non-Gaussian quantum optomechanics and spin-mechanics

Number of Posts: 1

Researcher Profile: Recognised Researcher (R2)

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: 01.04.2024**

### **Department/Facility description**

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

### **Job Profile**

As part of the work package WP1 of the OP JAK QUEENTEC project, the postdoctoral researcher will deal with the analysis of the control of the quantum properties of the motion and oscillations of cooled atoms, ions, molecules, nanoparticles and other systems, their nonlinear interactions and numerical modelling of these processes and interactions for experimental proposals.

The postdoc will collaborate with the theoretical team at the Department of Optics, Faculty of Science UP, led by Prof. Radim Filip, scientific workers Dr. Alisa Manukhova, Dr. Darren Moore, and Dr. Andrej Rakhubovsky and with experimental teams at the Department of Optics of the Academy of Sciences of the Czech Republic in Olomouc (Dr. L. Slodička), at the Institute of Instrumentation of the Academy of Sciences of the Czech Republic in Brno (Prof. Zemánek, Dr. O. Číp) and the Jaroslav Heyrovský Institute of the Academy of Sciences of the Czech Republic in Prague (Dr. J. Fedor) involved in the QUEENTEC project. The mentor of the postdoctoral researcher will be Prof. Radim Filip.

### **Requirements**

- Ph.D. in Physics
- Specialization in quantum control of mechanical systems, quantum feedback control and quantum metrology
- Publication track record in quantum control of mechanical systems, quantum feedback control and quantum metrology
- 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 08.03.2024.**

#### **Contact person**

Filip Radim, prof. Mgr., Ph.D., radim.filip@upol.cz, +420 585 634 249

#### **Additional Information**

In exceptional cases the announcer reserves the right not to fill the job position or to cancel the selection procedure without giving any reason.