

## Research Scientist in Optics and Laser Interferometry

The Institute of Instrumentation of the Czech Academy of Sciences is a research institution focused on fundamental and applied research in optics and laser technology, electron microscopy, magnetic resonance and cryogenics, microphotonics, medical signal processing, and electron and plasma technologies.

We are looking for a new colleague to join the Interferometric and **Fibre-Optic Instrumentation group** in the **Department of Coherent Optics**. The successful candidate will specialise in the development, design, simulation, and implementation of laser interferometers, optical systems, and fibre-optic systems.

Our team has long been engaged in research and development in **laser interferometry and fibre-optic sensing**. We focus on the design and characterisation of new laser interferometers and optical systems, as well as on the development of new measurement and calibration methods. We collaborate with international teams and conduct both fundamental and applied research. We are currently expanding our group.

In this position, you will contribute to research projects in both fundamental and applied research. Your work will include designing and simulating optical systems for laser interferometers, participating in their implementation, preparing experimental verification of their properties, evaluating measured data, and incorporating the results back into simulations.

This position is suitable for talented master's graduates, postdoctoral researchers, and experienced scientists. You will become an important part of our research team and will have the opportunity to contribute to interesting projects — and eventually to develop and lead your own.

### Job Description

- design and simulation of optical assemblies for laser interferometers and other optical and fibre-optic systems
- design and preparation of implementation processes for proposed optical assemblies

- design of experimental setups for the characterisation and measurement of optical systems
- evaluation of data from experimental measurements

### **Requirements**

- at least a master's degree in physics, engineering, or a related technical field
- experience with simulations and modelling in COMSOL, Zemax, or similar tools
- knowledge of basic optical elements and their properties, such as beam splitters, mirrors, optical filters, polarisation, and coherence
- reliability, a technical mindset, and the ability to work independently
- a proactive approach to solving research and technical tasks

### **We Offer**

- an exciting position with long-term prospects
- the opportunity to participate in ongoing research and development projects and to lead your own projects in the future
- full-time employment
- work in an experienced scientific team
- flexible working hours
- a clean work environment and comprehensive training
- a workplace equipped with state-of-the-art technology
- opportunities for further education and professional development
- competitive compensation commensurate with your skills and experience
- 5 weeks of vacation
- staff canteen and subsidised meals
- the option to start immediately or by agreement

If this opportunity interests you and you would like to join our team, please send us your structured resume and cover letter to: Ing. Dominika Jestříbková, [jestribkova@isibrno.cz](mailto:jestribkova@isibrno.cz)