Institute of Scientific Instruments of the CAS
Královopolská 147, 612 00 Brno, Czech Republic
phone: +420 541 514 111
www.isibrno.cz

Time and Frequency Metrology: Junior Scientist/Researcher in Physics

Introduction: Join the Institute of Scientific Instruments, Czech Academy of Sciences

The Institute of Scientific Instruments (ISI), Czech Academy of Sciences, is a leading and well-established scientific institution of basic and applied research across optics and laser technologies, electron microscopy, magnetic resonance, cryogenics, medical signals, and electron and plasma technologies.

The Opportunity: Junior Scientist/Postdoc in Frequency References and Dissemination Group

The Frequency References and Dissemination group, part of the esteemed Coherent Optics Department, is actively seeking motivated junior scientists to join its team. You will play a key role in researching and developing state-of-the-art methods for time and frequency metrology, laser frequency locking and optical time and frequency distribution networks.

This full-time position offers a unique chance to participate in international scientific projects, drive the search for innovative solutions, and become an essential member of a dynamic and top-tier scientific team.

Key Responsibilities

- Conduct both theoretical and experimental research with a focus on advancing time and frequency metrology and laser spectroscopy methods.
- Perform rigorous characterisation of implemented systems using scientific instrumentation, signal processing, and data evaluation techniques.
- Utilise SW simulation tools (such as Comsol, Ansys, Zemax) for optical system modelling and design.
- Actively contribute to and collaborate within international research projects.
- Present your significant research achievements through publications in leading research journals and presentations at international conferences.

Qualifications and requirements

We are looking for candidates who possess:

- University degree in Physics, Optics, or a closely related field (PhD or equivalent is an advantage).
- Hands-on experience with physical or optical experimental setups and work with scientific laboratory instruments.
- Proficiency in SW simulation tools and scientific data processing algorithms.
- A strong aptitude for innovative and critical thinking, coupled with responsibility and diligence.
- Reliability and the ability to work effectively both autonomously and as part of a team.
- Genuine personal motivation for continuous professional growth and scientific discovery.

What We Offer You

Joining our team means access to:

- Active involvement and collaboration in exciting international scientific projects.
- An opportunity for highly creative, interdisciplinary work with a clear long-term perspective in a cutting-edge field.
- Access to state-of-the-art, high-tech laboratories and a supportive, friendly, and helpful team environment.
- The unique opportunity to propose, develop, and implement your *own* research and development projects.
- Excellent pathways for career growth and robust support for further education, including opportunities for foreign internships and specialised training.
- Competitive, above-standard remuneration that truly corresponds to your abilities, expertise, and contributions.
- Outstanding work-life balance supported by flexible working hours and a generous 5 weeks of annual vacation.

Location: Brno, Czech Republic

How to Apply:

If you are excited by this opportunity and meet the requirements, please submit your application, including CV and cover letter, to Dominika Jestříbková, jestribkova@isibrno.cz