



Postdoctoral Researcher in (Bio)Physics

Are you interested in single-molecule research that exploits a combination of optics, materials, chemistry and nanotechnology to tackle biological problems?

We are seeking a motivated **Postdoctoral Researcher** to join the prestigious 5-year **ERC CZ** project **NanoMassOscillator** (prf.jcu.cz/en/faculty/sustainable-faculty/news/two-projects-from-the-faculty-of-science-received-funding-under-the-erc-cz-program)

The project aims to develop a novel technology for measuring the **mass and charge** of individual proteins in solution. It builds on the 4-year research of PI **Jiří Kratochvíl** at **University of Oxford** exploiting advanced surface science to transform single molecule optical measurements by **mass photometry**.

Hosted by Faculty of Science (Department of Physics) located in campus shared with Biology Centre of the Czech Academy of Sciences offers an outstanding multidisciplinary environment.

You will join a multidisciplinary team of physicists, chemists and biologists developing new approaches to study individual proteins and their interactions. Tailored to your expertise, you may focus on instrumentation development, nanofabrication, optical measurements, data analysis and publishing in top scientific journals.

We seek for candidates with:

- Ph.D. in Physics, Biophysics, Engineering or a related field
- Experience with development of new technologies
- Proficiency in data processing and interpretation

Advantageous Skills:

- Optical microscopy (e.g. single-molecules, custom optical setup development)
- Photolithography and nanopatterning (e.g. microfluidics devices, surfaces)
- Electrochemistry and materials
- Experiment and data processing automation
- Communication skills in a multidisciplinary environment

We offer:

- **2-year** contract with the possibility of extension
- Monthly salary of **50 000 – 70 000 CZK** (by experience). Earn up to 1.5× the Czech median salary in České Budějovice, where high living standards meet low living costs.
- Employee benefits, including a meal allowance, dining hall in campus, language education, 5-week of paid leave, and childcare benefits (see jcu.cz/en/university/employees).

How to apply?

Email us jkratochvil@prf.jcu.cz (subject: **NanoMassOscillator - YourName**), include:

- **CV (max. 2 pages) and motivation letter (max. 1 page)**
- **Contact details for 2 referees who can provide recommendation letter**

Expected start date is flexible, with an earliest start date of **October 1, 2026**.

Feel free contact us for additional information.

