Technische Universität Berlin

Technische Universität Berlin offers an open position:

Research Assistant - 0.75 working-time - salary grade E13 TV-L Berliner Hochschulen

Faculty II - Institute of Optics and Atomic Physics / Ultrafast Nanoscience
Reference number: II-45/25 (starting at the earliest possible / limited for 3 years / closing date for applications 15/05/25)

Working field:

We are offering a position for a Ph.D candidate, focused on studying femtosecond atomic motion in quasicrystals and the femtosecond evolution of quasi-particles associated with aperiodic atomic order. The project will use several ultrafast experimental techniques, with the primary one being femtosecond electron diffraction, carried out in our labs the Fritz Haber institute of the Max Planck society in Berlin-Dahlem. The project will be carried out in the team of Dr. William Windsor within the “Ultrafast Nanoscience” group of Prof. Ralph Ernstorfer. This highly diverse and international team employs ultrafast diffraction techniques to study a wide range of ultrafast phenomena in condensed matter systems. The position is a 3-year position with a 6-month probation period.

Tasks:

Experimental work is done in a team environment. The applicant is then expected to pursue their research work independently.

- Conduct ultrafast experiments in the group’s labs on ta self-defined research topic
- Take part in the team’s experiments (locally and in international facilities)
- Pursue independent research on acquired results: data analysis, interpretation, communication (e.g. publications) , presentation (conferences)
- Take part in the teaching responsibilities of the group within TU Berlin.

Requirements:

- Successfully completed university degree (Master, Diplom or equivalent) in physics, physical chemistry, geophysics, or an equivalent field.
- Good knowledge of German and/or English required; willingness to acquire the missing language skills.
- Programming skills: Matlab, Python etc.

Desirable:

We are looking for highly motivated, curious, and enthusiastic, researchers with excellent academic records and strong interests in fundamental materials’ physics, ultrafast science, and their potential intersection. BSc or MSc level research experience in one of the following fields is an advantage:

- crystallography and diffraction methods (X-ray, electrons, or Neutrons)
- femtosecond lasers or ultrafast science
- optical or THz research
- phonon-related studies (e.g. Raman)
- Ability to work independently as well as in a team environment.

Please send your application **with the reference number** and the usual documents (a letter of motivation, a CV and a complete list of publications together with the contact details of two references) **only by email** (single pdf file, max. 5 MB) to Dr. William Windsor (**windsor@tu-berlin.de**).

By submitting your application via email you consent to having your data electronically processed and saved. Please note that we do not provide a guarantee for the protection of your personal data when submitted as unprotected file. Please find our data protection notice acc. DSGVO (General Data Protection Regulation) at the TU staff department homepage: https://www.abt2-t.tu-berlin.de/menue/themen_a_z/datenschutzerklaerung/.

To ensure equal opportunities between women and men, applications by women with the required qualifications are explicitly desired. Qualified individuals with disabilities will be favored. The TU Berlin values the diversity of its members and is committed to the goals of equal opportunities. Applications from people of all nationalities and with a migration background are very welcome.

Technische Universita?t Berlin - Die Pra?sidentin - Fakultät II, Institut für Optik und Atomare Physik, FG Nanowissenschaften auf ultraschnellen Zeitskalen, Prof. Dr. Ernstorfer, Sekr. ER 1-1, Straße des 17. Juni 135, 10623 Berlin

The vacancy is also available on the internet at
https://www.personalabteilung.tu-berlin.de/menue/jobs/