



As one of the largest employers in Tyrol the University of Innsbruck offers a diverse and exciting field of activity for employees with various educational and occupational backgrounds. The University of Innsbruck welcomes personnel diversity and is committed to the principle of equal opportunity.

The Department of Physical Chemistry offers a:

PhD position (30 h/week)

(Employment for the period of 36 months; position to be filled at the earliest time)

The <u>Surface chemistry group</u> at the University of Innsbruck aims at tackling fundamental scientific questions about excitonic phenomena occurring in two-dimensional photoactive covalent organic frameworks. Probing excitons at the atomic scale will provide insight into the role of the structure in determining the yield of exciton dissociation, delivering innovative solutions for improving the efficiency of photoenergy conversion in organic frameworks. This approach will pave the way to the next generation of materials for artificial photosynthesis.

Required qualifications:

- Successfully completed scientific university studies (diploma, master's degree) in chemistry, physics, materials science or a comparable discipline
- Basic knowledge and practical experience in at least one of the following areas: scanning tunneling microscopy (STM), atomic force microscopy (AFM), X-ray photoelectron spectroscopy (XPS), ultra-high vacuum (UHV), optics and laser technology.
- Basic programming skills (e.g., Python, Igor pro, MATLAB, LabVIEW)
- Very good written and spoken English skills.

Job profile:

As the successful candidate, you will be responsible for the on-surface synthesis of atomically precise two-dimensional frameworks. The growth process will be monitored in-situ by near-ambient pressure X-ray photoelectron spectroscopy (NAP-XPS). The successful candidate will operate state-of-the-art scanning tunneling and atomic force microscopy (STM/AFM) for high-resolution imaging of the two-dimensional frameworks. Novel AFM-based techniques will be developed to image photoexcited states directly at the atomic scale. Research stays abroad are foreseeable.

Offer:

The position is funded as part of the ERC Starting Grant "WEPOF" and will be typically limited to three years. Employment extent: 30 hours/week. Remuneration will be based on the FWF scheme. Furthermore, the university has numerous attractive offers.

Application:

Please send your application documents including CV, contacts for two references, motivation letter and certificates, by 30.9.2023 to Prof. Dr. Laerte Patera (<u>laerte.patera@uibk.ac.at</u>). Only complete applications will receive full consideration.







The University of Innsbruck is committed to raising the quota of female employees and therefore particularly welcomes applications from qualified women. This applies particularly to managerial as well scientific positions. In the case of female underrepresentation, women with equal qualifications will be given priority.

In accordance with Austrian disability laws, qualified people with special requirements are expressly encouraged to apply for jobs.

www.uibk.ac.at/karriere