



For our location in Hamburg we are seeking:

Postdoc - Catalytic reactions on oxide surfaces in real time using spectroscopic techniques

Limited: 3 years | Starting date: earliest possible | ID: FSPO005/2023 | Deadline: 12.06.2024 | Full-time/Part-time

DESY, with more than 3000 employees at its two locations in Hamburg and Zeuthen, is one of the world's leading research centres. Its research focuses on decoding the structure and function of matter, from the smallest particles of the universe to the building blocks of life. In this way, DESY contributes to solving the major questions and urgent challenges facing science, society and industry. With its ultramodern research infrastructure, its interdisciplinary research platforms and its international networks, DESY offers a highly attractive working environment in the fields of science, technology and administration as well as for the education of highly qualified young scientists.

The DESY NanoLab has an active in-house research program within the fields of X-ray physics and nanoscience. In addition, it provides characterisation and preparation methods which are complementary to the techniques available at the different DESY accelerator-based light sources. We are seeking a talented postdoc to design and conduct time-resolved X-ray photoelectron spectroscopy on nanoscale catalysts. The aim of the project is to investigate catalytic reaction mechanisms and dynamics at their intrinsic ultrafast time scales at the free electron laser FLASH and the EU XFEL in Hamburg, respectively.

About your role:

- Design and implementation of experiments on oxide and metal nanoparticle catalysts
- Design and implementation of time-resolved surface-sensitive techniques
- Actively involving in the operation of the FS-NL Ultra-high vacuum and spectroscopy Laboratory, mainly Infrared reflection absorption spectroscopy and X-ray photoelectron spectroscopy
- Supporting the User and in-house research at DESY NanoLab

Good reasons to join:

Look forward to a unique working environment on our international research campus. Respectful cooperation and the well-being of our DESY employees are particularly important to us. Gender equality is an important aspect for us. To support work life balance we offer flexible working hours, variable part-time, job-sharing models and participation in mobile work (up to 50%). You will benefit from our family-friendly and collegial atmosphere, our established health management and occupational pension provision. As a public funded employer, we offer you a secure workplace and facilitate your individual career with our comprehensive training and development opportunities. Remuneration is according to the regulations of the TV-AVH. DESY offers its employees a financial supplement for a German job ticket at both locations.

About you:

- PhD in physics or chemistry
- Experiences with time resolved experiments
- Experience with X-ray photoelectron spectroscopy
- Experience with Infrared reflection absorption spectroscopy
- Experience with lasers and laser facilities
- Experience with oxide and semiconductors
- Experience with Ultra-high vacuum techniques
- Experience with catalysis and nanoscience would be an advantage
- Very good English (speaking and writing) is required
- Ability to work in team

For further information please contact Dr. Heshmat Noei at +49 40 8998-6011 (heshmat.noei@desy.de) or Prof. Dr. Andreas Stierle +49 40 8998-2005 (andreas.stierle@desy.de).

Please submit your complete application documents (letter of motivation, CV and relevant certificates).

We look forward to receiving your application via our application portal:

[-> Apply now](#)

DESY promotes equal opportunities and diversity. The professional development of women is very important to us and therefore we strongly encourage women to apply for the vacant position. Applications from severely disabled persons will be given preference if they are equally qualified (sbv.desy.de).

You can find further information here:
<https://www.desy.de/career/>

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