



# X-RAY DIFFRACTION.

## DESY, Hamburg location, is seeking: Postdoc (f/m) at the Swedish high-energy X-ray material science beamline (P21)

### DESY

DESY is one of the world's leading research centres for photon science, particle and astroparticle physics as well as accelerator physics.

Looking back on a long tradition in research with synchrotron radiation, DESY is currently developing into one of the leading centres in the field of photon science worldwide. With the storage ring PETRA III and the Free-Electron-Laser FLASH, DESY offers a unique combination of photon sources to the scientific community. PETRA III, one of the most brilliant hard X-ray facilities world wide, currently provides 17 undulator beamlines for experiments utilizing the extreme source brilliance. For the extension of the PETRA III facility, DESY is seeking a scientist to develop and implement new instrumentation for wide-angle X-ray diffraction techniques, both single grain and powder, at the Swedish high-energy X-ray (40-150 keV) material science beamline (P21).

### The position

- Strengthen the wide-angle X-ray diffraction program (WAXS), both single grain diffraction (3DXRD) and grain averaged (powder) diffraction with emphasis on structure refinements and spatial resolution
- Design and implement relevant instrumentation (including X-ray optics and sample environments)
- Employ relevant data reduction and evaluation software (develop own software as necessary)
- Perform scientific projects and work closely with external users and collaborators

### Requirements

- PhD in physics, chemistry, materials science, or related fields
- Background on the structural characterization of polycrystalline materials by wide angle diffraction and preferably on chemical crystallography
- Experience with synchrotron X-ray (preferably high-energy) diffraction techniques
- Experience with data acquisition control software and scientific programming techniques
- Experimental skills and interest in instrumentation development
- Excellent knowledge of English and teamwork abilities

For further information please contact Dr. Ulrich Lienert +49-408998-3165 or Dr. Wolfgang Drube +49-40-8998-2674.

The position is limited to 3 years.

Salary and benefits are commensurate with those of public service organisations in Germany. Classification is based upon qualifications and assigned duties. Handicapped persons will be given preference to other equally qualified applicants. DESY operates flexible work schemes. DESY is an equal opportunity, affirmative action employer and encourages applications from women. Vacant positions at DESY are in general open to part-time-work. During each application procedure DESY will assess whether the post can be filled with part-time employees. There is a bilingual kindergarten on the DESY site.

We are looking forward to your application quoting the reference code preferably via our electronic application System: Online-Application

### Deutsches Elektronen-Synchrotron DESY

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**Deadline for applications: 9 October 2017**

[www.desy.de](http://www.desy.de)