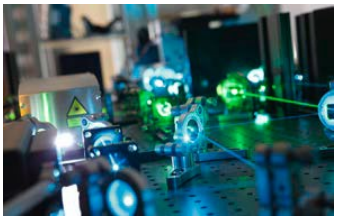

IFNANO
INSTITUT FÜR NANOPHOTONIK

Institut für Nanophotonik Göttingen e. V.

Abteilung Optische Nanoskopie

Since its foundation in 1987, the Institut für Nanophotonik Göttingen has been a pioneer in the transfer of application-oriented research between science and industry. Its research activities range from the development of novel laser measurement techniques, laser-assisted product refinement and the development of new light sources to applications in the life sciences and medical technology.

The Department of Optical Nanoscopy focuses its research on the Nobel Prize winning field of superresolution fluorescence microscopy and develops novel methods and devices for the life sciences. In addition, it transfers the underlying principle of optical nanoscopy to other areas such as materials science in order to overcome Abbe's diffraction barrier there as well.

We are currently seeking a candidate for a

PhD position (m/f/d) in physics

to contribute to the DFG-funded collaborative project **"Fast monochromatic reflection nanoscopy by absorption modulation"** at the earliest possible date.

Optical reflection microscopy is an important analysis tool for material surfaces; however, its application is severely restricted due to its diffraction-limited resolution. To improve the resolution, thin photochromic films can be applied to the surface under examination. In cooperation with our partners at TU Clausthal, we have already provided the first experimental evidence that absorbance modulation of such films can improve the resolution of reflection measurements. The goal of the aforementioned DFG-project is to advance the method towards fast reflection nanoscopy with super-resolution in two dimensions.

Your responsibilities:

- Experimental and in part theoretical work on the design and realization of a reflection nanoscope and on the development of suitable imaging strategies
- Optical characterization of thin photochromic films
- Close collaboration with cooperation partners from organic and physical chemistry, materials science and measurement technology.
- Presentation of results to project partners and to the international scientific community.

Your qualifications:

- Master of Science or equivalent degree in physics or a related field
- Preferably strong background in optics/microscopy and basic knowledge of programming
- Good command of spoken and written English
- High degree of commitment and motivation as well as interest in interdisciplinary research

We offer:

- Interdisciplinary team working in a cutting-edge research area at the interface of physics, biology, chemistry and materials science
- Extensive state-of-the-art equipment
- Excellent integration into the Göttingen Campus

The project-related position is initially limited to 3 years and will be paid in accordance with German E 13 TV-L (66.67%). Applications of female candidates are particularly welcome. Severely disabled persons with equal qualification and aptitude are given preferential consideration.

If we have sparked your interest, please send your detailed application in pdf-format to: karriere@ifnano.de.

For further information about the position, do not hesitate to contact us: Fenja Belosa (fenja.belosa@ifnano.de), Institut für Nanophotonik Göttingen e. V., Hans-Adolf-Krebs-Weg 1, 37077 Göttingen, phone: 0551/5035-36, web: www.ifnano.de