



## Institute for Nanophotonics Goettingen e.V.

### Department of Optical Nanoscopy

Since its founding in 1987, the Institute for Nanophotonics Goettingen has been a pioneer in the transfer of application-oriented research between science and industry. The activities range from the development of novel laser measurement techniques, product refinement using lasers, the development of new beam sources to applications in the life sciences and medical technology.

Our group uses the light emission of living cells for imaging that is generated by the process of bioluminescence. We apply a genetically encodable bioluminescence system to create autonomously glowing cells and improve the brightness of this system in different cell types. In this project, we will explore the use of newly developed optical fibers for the detection of bioluminescence signals at great depths of large biological specimens, which cannot be accessed with common camera-based imaging methods. A fiber-based setup will be developed in collaboration with a German company and applied for bioluminescence measurements.

We invite applications for a

### Master student (m/f/d) position

The position is available from autumn 2024 or later and limited to a duration of 12 months.

#### Activities and responsibilities

- Construction of a fiber-based bioluminescence imaging system
- Test measurements using biological samples, data visualization

#### Qualification profile

- Bachelor's degree in physics or a related subject
- Ideally experience in optics and basic programming skills

#### We offer

- Interdisciplinary team in a cutting-edge research area at the interface of physics, biology, medicine and materials science
- Extensive and modern equipment
- Excellent integration into the Goettingen campus

Women are especially encouraged to apply. Applicants with disabilities and equal qualifications will be given preferential treatment.

Please send your application in German or English language including **curriculum vitae** and **Bachelor certificate** as PDF files to [karriere@ifnano.de](mailto:karriere@ifnano.de).

For additional information, please contact Dr. Carola Gregor, Institute for Nanophotonics Goettingen e.V., Hans-Adolf-Krebs-Weg 1, D-37077 Goettingen, [carola.gregor@ifnano.de](mailto:carola.gregor@ifnano.de), Tel.: +49(0)551-5035-45.