



MAX PLANCK INSTITUTE
FOR THE SCIENCE OF LIGHT

The Max Planck Institute for the Science of Light research covers a wide range of topics, including nonlinear optics, quantum optics, nanophotonics, photonic crystal fibres, optomechanics, quantum technologies, biophysics, and links between physics and medicine.

PhD student position (f/m/d) quantum optics and quantum technologies

Quantum light in general and single photons in particular are essential resources for many of the upcoming quantum technologies. Ideally, one wants to generate single and few photon states deterministically. However, this seemingly simple task poses a huge experimental challenge. In this project, we will tackle this unresolved issue. The core of our non-classical light sources are organic molecules coupled to a carefully engineered environment, which will allow us to collect nearly every photon emitted by a well-defined number of molecules.

The successful candidate has the opportunity to work on a state-of-the-art experiment at the forefront of solid-state quantum optics. She/he will be part of the newly established Collaborative Research Centre Transregio (TRR 306) **QuCoLiMa (Quantum Cooperativity of Light and Matter)**. The project itself will be conducted at the Max Planck Institute for the Science of Light, which offers excellent working conditions and a vibrant research environment in an internationally recognised research facility. The successful applicant will also have the opportunity to be part of the International Max Planck Research School (IMPRS - Physics of Light).

The salary is based on E13 75% TVöD Bund.

Please submit your complete application including your CV, a copy of your transcripts and the contact details of 1-2 academic references to Stephan Goetzinger (stephan.goetzinger@mpl.mpg.de).

The Max Planck Society strives for gender and diversity equality. We welcome applications from all backgrounds. Furthermore, the Max Planck Society is committed to increasing the number of individuals with disabilities in its workforce and therefore encourages applications from such qualified individuals.



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