



MAX PLANCK INSTITUTE
FOR THE SCIENCE OF LIGHT



Postdoctoral positions in Molecular Quantum Optics

Postdoctoral positions are now available in the **Nano-Optics** division of the **Max Planck Institute for the Science of Light** (MPL) in Erlangen, Germany. You will be embedded in a dynamic interdisciplinary group at a world-leading research institute with excellent resources such as state-of-the-art mechanical and electronic workshops and a high-end nanofabrication cleanroom.

The overarching goal in a number of exciting projects is to *understand and control* the interaction of quantum emitters, in particular organic molecules, with their nanoscopic environment and with each other. To do this, we explore and employ a wide range of phenomena, involving the optical near field, phononic couplings as well as long-range photonic interactions in integrated nanocircuits. For more information about the activities of MPL and the Nano-Optics group please consult a sample of our publications [1-6] and website at: <https://www.mpl.mpg.de>

We seek highly motivated candidates with a strong scientific background and hands-on experience in physics or physical chemistry. Mastery of at least one of the following research areas is highly desirable:

- Laser spectroscopy
- Atomic and molecular physics
- Quantum optics
- Condensed matter physics
- Optomechanics
- Quantum information science
- Optical microscopy

In addition, candidates should enjoy team work. Programing skills (e.g., Matlab, Python, LabView), advanced knowledge of electronics, cryogenic experience, and excellent organizational and communication skills are also advantageous. The position will be funded for two years with an option for extension up to five years. Application material should include 1) curriculum vitae, 2) motivation letter, 3) university grades, 4) list of publications, and 5) names of three individuals who could send a letter of recommendation. Applications should be sent to sandoghdar-office@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.

[1] A. Pscherer, et al, *Phys. Rev. Lett.*, **127**, 133603 (2021); [2] C. Toninelli, et al, *Nature Materials* **20**, 1615 (2021); [3] V. Sandoghdar, *Nano Lett.* **20**, 4721 (2020); [4] D. Wang, et al, *Nature Physics* **15**, 483-489 (2019); [5] A. Maser, et al, *Nature Photonics* **10**, 450 (2016); [6] R. Lettow, et al, *Phys. Rev. Lett.* **104**, 123605 (2010).