



The Max Planck Institute of Microstructure Physics (MPI-MSP), Halle, Germany, Department of Nanophotonics, Integration, and Neural Technology led by Director Prof. Joyce Poon, and the Quantum Photonics Laboratory at the Massachusetts Institute of Technology (MIT) led by Prof. Dirk Englund are recruiting jointly supervised

Postdoctoral Fellows in Integrated Photonics

for projects on **photonic neural accelerators and UV-VIS photonics**. The positions may be taken up at MIT in Cambridge, MA, USA or at the MPI-MSP in Halle.

For information about the projects, please visit <https://s.gwdg.de/2hTx5Y>
For the recruitment at the Max Planck Institute of Microstructure Physics:

Your Tasks

- Investigate and develop photonic integrated circuits for neural recording processing or quantum information
- Design, layout, and measure integrated photonic devices and circuits
- Integrate the photonic chips into microsystems that include, for example, electronics and discrete optical components
- Train and work closely with other students and researchers
- Interact with collaborators and external partners when necessary

Your Profile

- You have earned or will soon earn a Ph.D. Degree in electrical engineering, physics, or a related discipline
- You are experienced in the simulation, design, and layout of integrated photonic devices and circuits
- You are proficient with CAD and simulation tools such as Lumerical, COMSOL
- You are experienced in the characterization of integrated photonic devices and circuits (experience in design-fab-test cycles using photonic foundries is useful)
- You have excellent written and oral communication skills in English

We Offer

- The opportunity to work at the forefront of scientific research with an incredible team of highly motivated and smart people
- The opportunity to interact with a wide network of international collaborators
- For postdoctoral fellowships located at the MPI-MSP:
 - Remuneration and social benefits depend on education and prior experience according to TVöD
 - Fixed-term contract initially for 2 years, with the potential of extension
- Start date: As soon as possible

Your Application

- Please upload your CV and the names of two references as a single pdf file to <https://s.gwdg.de/H0AT77>.
 - If you have a project preference, please indicate it in a cover letter.
 - Please name your file with your name as lastname_firstname.pdf.
 - Your file has been successfully uploaded if you see your filename under "Uploaded files" after your submission.
- If you encounter problems with the file upload, please email office.poon@mpi-halle.mpg.de.
- If you have questions about the research, please contact Prof. Dirk Englund (englund@mit.edu) and admin balzer@mit.edu) or Prof. Joyce Poon (joyce.poon@mpi-halle.mpg.de).

The Max Planck Society aims to employ more persons with disabilities. Applications from persons with disabilities are encouraged. The Max Planck Society seeks to increase the number of women in areas where they are underrepresented and therefore encourages women to apply.