

The Max-Born Institute for Nonlinear Optics and Short Pulse Spectroscopy (MBI) conducts basic research in the field of nonlinear optics and ultrafast dynamics arising from the interaction of light with matter and pursues applications that emerge from this research. It develops and uses ultrafast and ultra-intense lasers and laser-driven short-pulse light sources in a broad spectral range in combination with methods of nonlinear spectroscopy.

With its research, MBI fulfills a national mission and is an integral part of the international scientific community.

The Max-Born-Institute invites applications for the position

Postdoctoral Research Associate (m/f/d)

in the field of mid-IR ultrafast spectroscopy in wide bandgap dielectrics.

Job profile:

The postdoctoral researcher will be supported by the ANR-DFG funding program, designed to expand and intensify French-German collaborations. The researcher will thus be a part of an international team pursuing research goals on the fundamentals of laser-matter interaction at ultrashort timescales.

The topic is the study of vibrational coupling between the material's lattice and the electron-hole plasma produced upon ultrashort pulse laser irradiation. In order to track the signature of vibrational coupling, glasses with specific molecular markers will be irradiated in a NIR/Mid-IR pump-probe scheme. Ultimately, such fundamental investigations aim to understand, control and optimize the laser-matter interaction for micro- and nano-processing applications.

Requirements:

The successful candidate holds a PhD degree in physics or a related area and has a background in nonlinear optics, material science and/or solid state physics. Additionally, the applicant is expected to show inclination for hands-on work in a scientific laboratory, including the ability to develop a simple software infrastructure for data acquisition and processing. Prior expertise in glasses and in IR ultrafast spectroscopy is considered as an important asset for this position.

Offer:

MBI offers a 9-month appointment. The payment is according to the German TVöD salary scheme for scientists in public research institutions. Start date: October 2021.

MBI is an equal opportunity employer and places particular emphasis on fostering career opportunities for women. Qualified women are therefore strongly encouraged to apply. If equally qualified, severely handicapped persons are given preference.

MBI supports the reconcilability of family and working life and is certified as family-friendly by the "family audit".

Please use the button "Apply online" and upload your application including cover letter, curriculum vitae, certificates and description of previous professional activities electronically via the MBI online recruiting platform at <https://mbi-berlin.de/career>. The deadline for applications is **July 31st, 2021**.