

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-riven short-pulse light sources in a broad spectral range in combination with methods of nonlinear spectroscopy. The spectral range includes in particular XUV radiation and soft x-rays, where experiments at in-house sources are complemented with the use of accelerator driven sources such as free electron x-ray lasers.

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

The Max-Born-Institute invites applications for the position

## Postdoctoral Position

### Ultrafast Soft-X-Ray Spectroscopy of Elementary Proton Transfer Reactions

#### Job profile:

The main objective of our research effort is the elucidation of ultrafast elementary charge transfer processes in solution. Currently, we use and further develop state-of-the-art techniques to determine the structural dynamics of reactive donor-acceptor complexes, including electron transfer, proton transfer and proton-coupled-electron transfer of prototypical molecular donor-acceptor complexes, which function as model systems for processes as diverse as electronic charge flow, aqueous proton transport or energy conversion.

The candidate will focus on the elucidation of ultrafast proton transfer reactions by use of ultrafast soft-x-ray spectroscopy. We have previously investigated to much effect the microscopic details of elementary steps in these charge transfer dynamics with transient IR spectroscopy. The candidate will contribute to this research topic by investigating the ultrafast dynamics of specially designed acid-base complexes.

#### Requirements:

The successful candidate has a PhD degree in physics or chemistry with above average marks. He/she has experience in at least one of the following fields: optical spectroscopy, soft-x-ray-spectroscopy, ultrafast optics and spectroscopy.

#### Offer:

The researcher position is available immediately and initially limited to 2 years. The payment is according to the German TVoED salary scheme for scientists in public research institutions.

The candidates will be members of a research team consisting of senior scientists, postdocs, and PhD students.

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

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

Please upload your application, including cover letter, curriculum vitae, certificates, references and description of previous studies and professional activities as well as a list of publications electronically via the MBI online recruiting platform at <http://www.mbi-berlin.de/de/jobs/index.html>. The deadline for applications is **31.08.2018**.

For further information and inquires please contact Dr. Erik Nibbering ([nibberin@mbi-berlin.de](mailto:nibberin@mbi-berlin.de)).