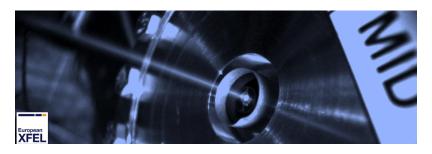
Scientific Opportunities with very Hard XFEL Radiation



Contribution ID: 15 Type: Poster

Enhanced Metallophilicity in Stimuli-responsive Dimer Complexes using Hard X-ray WAXS and HERFD-XAS

Thursday 19 January 2023 18:56 (7 minutes)

We are investigating the formation of metallophilic bonds in luminescent stimuli-responsive compounds based on ligand-supported $\operatorname{Au}(I)/\operatorname{Ag}(I)/\operatorname{Cu}(I)$ complexes upon electronic transition to the emissive excited state. Combining pump-probe X-ray absorption spectroscopy with high energy resolution (HERFD-XAS) and wide-angle X-ray scattering (WAXS) in the solution we can visualize the local redistribution of electron density as well as the drastic changes in molecular structure when a weak metallophilic bond is formed in the triplet excited state.

Primary author: PAUL DUTTA, Sharmistha (Eur.XFEL (European XFEL))

Presenter: PAUL DUTTA, Sharmistha (Eur.XFEL (European XFEL))

Session Classification: Poster Session

Track Classification: Structural dynamics in disordered matter in real and reciprocal space