Max-Planck-Institut für
Struktur und Dynamik der Materie
Max Planck Institute for the Structure and Dynamics of Matter

IMPRS UFAST Call for PhD applications 2020/2021

Time-resolved structural biology to study enzyme mechanism
A. Pearson

Title of PhD Project	**Time-resolved structural biology to study enzyme mechanism**
Type	Experimental
Supervisor(s)	Prof. Arwen Pearson
Affiliation(s):	UHH
Number of positions:	1
Abstract:	Time-resolved structural studies provide unprecedented insight into the molecular underpinnings of light. However, in order to obtain clear pictures of a reaction progression over time, all the molecules being imaged need to be doing the same thing. Achieving this synchronous reaction initiation is one of the big challenges in time-resolved studies. In this project you will work on generating and characterising the chemical tools needed to carry out time-resolved structural studies of several of the large protein machines that are responsible for life. You will have experience in one of synthetic organic chemistry, biochemistry, physical chemistry or physics and will join a vibrant and multidisciplinary research team based in the new Hamburg Advanced Research Centre for Bioorganic Chemistry at the Universität Hamburg.
Contact person for scientific questions about the project:	Arwen Pearson: arwen.pearson@cfel.de