

Probing photoinduced protein function by time resolved X-ray scattering

G. Schiro¹

¹IBS - CNRS

giorgio.schiro@ibs.fr

Biological macromolecules are characterized by specific structural and dynamic features that are at the basis of their biological activity. Understanding macromolecular activity thus requires studying structural changes over time and on various time scales. Time-resolved X-ray scattering permits tracking macromolecular conformational changes along a photoinduced reaction pathway. I will show results from our studies on light-induced protein structural dynamics in model systems and in photoreceptors involved in cell signalling, photoprotection and photoinduced gene regulation.