

Using the ALEX nylon mesh holder for time-resolved serial crystallography: successes and drawbacks.

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We successfully executed a time-resolved serial crystallography experiment using our ALEX nylon mesh holder. The holder had previously been used for static structures and is not designed explicitly with light-activated systems in mind. Though we successfully captured structural dynamics by de-caging Zinc atoms using a pump laser, there are limitations and inefficiencies in the system that have drawbacks. I shall present the technical details of the experiment and discuss the pros and cons of using a nylon mesh holder for UV pump, pink beam probe, tr-SSX at BioCARS beamline at the Advanced Photon Source.