

Micro-ED. Outrunning damage, phasing and multiple scattering

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I'll discuss the prospects for outrunning radiation damage using short electron beam pulses in 3D electron protein crystallography (1), the limitations on the method due to multiple Bragg scattering (2), and phasing methods. Approaches to growing the required sub-micron protein crystals will also be discussed based on our experience making them for use at X-ray free electron lasers (3).

References

1. J.C.H. Spence. Struct. Dyn. (2017), Vol. 4, 044027
2. G. Subramanian *et al.* Ultramic. (2015) Vol. 148, 87
3. J.C.H. Spence IUCrJ (2017), Vol. 4, 322–339