

Radiation Damage in Macromolecular Crystallography: what metrics are useful?

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Over twenty years of research into the effects of radiation damage on protein structures both at room temperature and when held at cryo-temperatures has resulted in many interesting and useful observations [reviewed in 1-3] but has still not provided a full understanding of the reported phenomena.

In this talk I will attempt to summarise the current state of knowledge and highlight the challenges in developing robust metrics for characterising the rates of global and specific damage.

References

[1] - J.M. Holton, *J. Synchrotron Radiation* **16**, 133–142 (2009)

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[3] – E.F. Garman and M. Weik, Chapter 4 in ‘Protein Crystallography: Challenges and Practical Solutions’
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