

Keynote Lecture

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The Science is in the Data

John Richard Helliwell¹

¹*School of Chemistry, University Of Manchester, Manchester, UNITED KINGDOM*
E-mail: john.helliwell@manchester.ac.uk

Understanding published research results should be through one's own eyes and thereby include the opportunity to work with the raw diffraction data to check the various decisions made in the analyses by the original authors. Today preserving raw diffraction data is technically and organisationally viable at a growing number of data archives, both centralised and distributed, which are empowered to register data sets and obtain their preservation descriptor namely a 'digital object identifier'.

Secondly, key policy makers are also looking to see a speed up in science discovery for urgent problems as aimed at improved treatment of disease and mitigation of environmental pollution; facilitating early data sharing is a key part of their new "Open Science" vision.

This brings us to the third role of preserving raw data namely understanding where we fail in or could improve our analyses. Individual science area case studies will be described.

Finally, the education of the new generation of crystallographers and the continual professional development of existing crystallographers should include the issue of research raw data management and reuse.

Keynote, no references

Keywords: [Raw diffraction data](#), [Sharing raw data and its reuse](#), [Open science](#)