Crystallographic review - perspectives from a chemical structural database

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The Cambridge Structural Database (CSD) was founded on a vision that collective use of data would lead to the discovery of new knowledge which transcends the results of individual experiments. Excellent data sharing practices in the crystallographic community as well as deposition and curation processes at the CCDC have enabled that vision to come to true.

This talk will demonstrate a number of ways in which a structural database such as the CSD can work with the community to help set standards from validation to publication and explore what part we play in the pre and post publication peer review of crystallographic data. We will share our experiences evolving our interactive deposition service, from the integration of checkCIF, to the establishment of links to raw diffraction data. We will also look at how repositories can support the peer review of data and what impact an increase of data published solely through the CSD might have. The presentation will conclude by looking at how reviewing crystallographic results might change in the future, how the CSD could evolve and how we can better help the community increase the integrity of data that is shared.

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