

Extending 3-Dimensional Printed Representations of Crystal Data: Printing Anisotropic Models and Assembling Structures Larger Than Your Print Tray

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As 3D printers are becoming ubiquitous, they are increasingly used to print molecular models used in communication, teaching, or artwork. This poster expands on past printing guides to detail how to use CCDC Mercury to print ellipsoidal structures, making the physical 3D models more similar to what would be reported in a paper or seen within a crystallography program. Additionally, a technique is presented for the dissection and post-printing assembly of crystal structures to allow the creation of structures larger than the printer in question can print in a single job. This will assist in the printing of large extended structures such as coordination polymers, macrocycles and metal-organic frameworks, as well as the printing of oversized models suitable for classroom use.

