Blender, a Free Tool to Import Data from All Fields of Crystallography and Export to the Virtual and Physical Space

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Blender is a free, open-source software that provides one of the most powerful and accessible means for 3D model manipulation. Blender itself is capable of importing over 12 different 3D file formats, including both .xyz's (a common chemistry file type) and .pdb's (protein data bank files). Many crystallographic software packages, including Vesta, Crystal Maker, Olex, ShelXle, Mercury, and Diamond, natively export blender compatible files. Blender can then be used to make any final visual corrections before exportation. The exported files can be imported and visualized directly with PowerPoint365, uploaded to online distribution platforms like Sketchfab to offer in-browser viewing, built into augmented reality applications for smart phones, or used as instruction files for 3D printing. By making use of Blender's free features, a crystallographer can take almost any set of data and turn it into an aesthetically pleasing form that can be shared with almost anyone.