XrayView: A teaching aid for X-ray crystallography

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Difficult concepts can be learned more easily by some learners by using visual methods. XRayiVIew is a simulator for X-ray diffraction experiments. In particular, it illustrates the Ewald sphere construction and the von Laue conditions of diffraction, the 3D reciprocal latttice, resolution, mosaicity and other basic components of single-crystal diffraction experiments.. One can also simulate the collections of data using monochromatic or polychromatic sources. The software has new features to allow quizzes with feedback and background text material. The software works on multiple platforms in downloadable form and a web-based version is under development. The talk will illustrate some of the features.