

## ICDD 2010 PRODUCT DEVELOPMENTS: DDView+ and Sleve+

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DDView+ is ICDD's powerful data mining and viewing XRD software. It has the ability to search through the entire ICDD PDF-4+ database using numerous permutations of XRD criteria. Once the desired search patterns are obtained, DDView+ can view extensive XRD information including diffraction, physical, crystal, and bibliographic data. In addition, these patterns have advanced tools such as simulated X-ray diffraction patterns, electron diffraction patterns, 2D ring patterns, and 3D structures. The power of DDView+ can be greatly extended through the use of Sleve+, ICDD's search-index software plug-in. Using highly optimized algorithms, Sleve+ can rapidly match the d-spacing lines of the user's experimental data to fit patterns in the PDF-4+ database.

To enhance the value of DDView+ and Sleve+, ICDD has incorporated many new developments for the 2010 product release. The charting package has been upgraded to increase performance and support mouse-wheel capabilities. Also, importing experimental data into Sleve+ has been greatly enhanced by adding a  $K\alpha_2$  profile stripping algorithm and by allowing the user to manually remove peaks found by the peak-search algorithm. Sleve+ now also contains a dynamic graph that plots and scales the currently accepted phases in real-time. Lastly, the user can now specify whether Sleve+ should weigh the d-Spacings for the search-index algorithm (which is useful for patterns with few peaks) or keep the intensities unweighted. These are just some of the value-added developments designed to make both DDView+ and Sleve+ more functional and powerful for 2010.