RIETVELD AMORPHOUS QUANTIFICATION WITHOUT THE PAIN, THE K-FACTOR APPROACH

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In this presentation we will show how the K-factor approach after B.H O'Conner & M.D. Raven¹, build into HighScore Plus 4.0, can elegantly be used to quantify amorphous material in complex samples without contamination of the sample by adding an internal standard (aka spiking) in any way.

The external intensity standard is used to put all Rietveld quantities on an absolute scale. The use of an external standard phase determines the instrument intensity constant, the so called K-factor. The external standard sample can be any 100% crystalline sample consisting of one or of several phases.