

Quantitative X-ray methods of amorphous content and crystallinity determination of SiO₂ in Quartz and Opal mixture

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Key Words: *XRD, Quantitative X-ray Diffraction Matrix Flushing, Crystallinity, Amorphous Content.*

Abstract: X-ray diffraction (XRD) technique is commonly used for qualitative analysis of minerals, and has also been successfully used for quantitative measurements. In this research, the matrix flushing and a new X-ray diffraction method have been used for the determination of crystallinity and amorphous content of Opal and Quartz mixture. The PC-APD is used to determine the quantitative analysis of these two minerals.