

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

Ketabdari, M. R. and Ahmadi, K.

Atomic Energy Organization of Iran, Laboratory Exploration Division,

P.O. Box 14155-1339, Tehran - 14374, Iran,

E-mail: ahmadikam@yahoo.com

Esmailnia Shirvani, A.

Faculty of Sciences, University of Shahid Beheshti, Iran

Tofigh, A.

NIOC Research Institute of Petroleum Industry

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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.