Characterization of the Particle Size and the Crystallinity of Certain Minerals by IR Spectrophotometry and Other Instrumental Methods—II. Investigations on Quartz and Feldspar

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Abstract: Infrared spectra of two minerals; Urkut quartz (Hungary) and a Swedish feldspar, of different origin with different physical characteristics and crystallinity were studied. Samples were taken after appropriate grinding, and infrared spectra, X-ray powder diffraction and water vapor absorption measurements were made along with electronmicrographs. Quantitative conclusions were drawn from changes of particle size and the ratio of bands of the Si—O groups and also the degree of crystallinity and changes of the particle size, respectively.

Key Words: Crystallinity • Feldspar • Grinding • Orthoclase • Quartz

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