## An Ultraviolet Spectroscopic Method for Monitoring Surface Acidity of Clay Minerals under Varying Water Content

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**Abstract:** The ability of a clay mineral surface to function as an acid is not represented by bulk pH measurements. A method using u.v. analysis and organic indicators has been developed to monitor surface acidity. The u.v. organic indicator method enables sensitive *in situ* quantification of surface-induced protonation in wet or dry clay systems. The clay preparation procedure used yields reproducible acidic behavior.

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