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Effect of Solvent on Protonation Equilibria of L-Cystein and L-Threonine in Aqueous Solutions of SLS

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ABSTRACT

The protonation constants of L-Cystein and L-Threonine have been studied pH metrically in various concentrations (0.0-2.50% v/v) of SLS- water mixtures maintaining an ionic strength of 0.16mol L^{-1} at 303 K. The protonation constants have been calculated with the computer program MINIQUAD75 and the best fit chemical models are selected based on statistical parameters. Linear variation of step-wise protonation constants ($\log K$) with reciprocal of dielectric constant of the solvent mixture has been attributed to the dominance of the electrostatic forces.

Keywords: Protonation constants, L-Cystein, L-Threonine, SLS, MINIQUAD75.
