



Studies on in Situ Generation of Chromium(IV) and its Involvement in the Kinetics of Oxidation of L-methionine in Aqueous Medium

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Abstract: Chromium (IV) complex was prepared by the procedure reported in the literature and it was characterized by UV spectroscopy. Kinetics and mechanism of oxidation of methionine by Cr (IV) in water follows first order kinetics with respect to oxidant. There of the reaction with respect of substrate in different solvent was found to be first order. Thermodynamic parameters were calculated. The increase in the acetic acid content of the medium was increased the rate of the reaction. The rate of the reaction was increased by increasing the ionic strength of the reaction.

Keywords: Chromium (IV) complex, methionine, kinetics, acetic acid, Ionic Strength.

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