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Kinetics of Oxidation of few organic substrates by chromium (VI) compounds –A Review

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Abstract : Chemical Kinetics is the study of time as a prime factor that adds interest and difficulty to this branch of chemistry. The testing of rate theories, the measurement of equilibrium constants, the analysis of solution, including the solutes and solvents and their properties depend upon the rate of the reaction. The highly toxic chromium (VI) compounds are converted into environmental friendly non-toxic chromium (III) compounds by using several oxidants like Nicotinium dichromate, Piperidinium chlorochromate, Quinolinium fluorochromate, Quinolinium dichromate. The reaction kinetics and rate constant for various chemical reactions are studied and the activation parameters have been evaluated. The key to the application of kinetics is also to determine the quality loss of deterioration of food.

Key Words: Chemical kinetics, Rate constant, Nicotinium dichromate, Piperidinium chlorochromate, Quinolinium fluorochromate, Quinolinium dichromate.

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