**Kinetic Investigation of Hydrolysis of Keto Esters Spectrophotmetrically**

3-Phenylisocoumarin and 3-(4'-methoxyphenyl)isocoumarin were synthesized. The synthesized compounds were converted into keto acids and subsequently into keto esters. The keto esters were hydrolyzed back into keto acids in presence of aqueous KOH solution. Pseudo first order and second order rate constants for the hydrolysis of reactions were determined spectrophotometrically. Reaction mechanism has been proposed. Rates of reactions at different temperatures were also determined and energy of activation of the reaction was calculated by plotting graph between In k and 1/T. pKa values of ketoacids were also determined and compared. It is observed that pKa value of substituted keto acid is less than the unsubstituted one because of presence of electron withdrawing methoxy group in the former keto acid.