

Determination of Stability Constant of Fluorosubstituted Chalconeamines for its Medicinal Efficiency

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Abstract: The good activity of drug is depending upon its stability constant i.e. proton ligand stability constant and metal ligand stability constant. If the stability constant is fairly very good then it should use as a good and effective medicine. In content to this in present work the proton ligand stability constant and metal ligand stability constant of fluoro substituted chalconeamines $L5 = 2\text{-Hydroxy naphthalene 4-dimethyl aniline 4-fluoro chalconeimine [FN]}$ are studied with highly reactive transition metal like (Cu (II), Co(II), Cr(II) and Fe(III)). The 70% dioxane water solvent system used in the present investigation. The presence of $-OH$ group confirmed by using of 0.1 M ionic strength. The transition metal (Cu (II), Co (II), Cr(II) and Fe(III)) used and the ligand form 1:1 and 1:2 complex with all values of $\log k_1$ and $\log k_2$ positive.

Keywords: Stability Constant, Chalconeimine, Fluoro Substitution, Transition metal ion

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