



Study on Adduct Formation Constants of Nickel (II) di(o-chlorophenyl) carbazonate with some Selected N-Bases Spectrophotometrically

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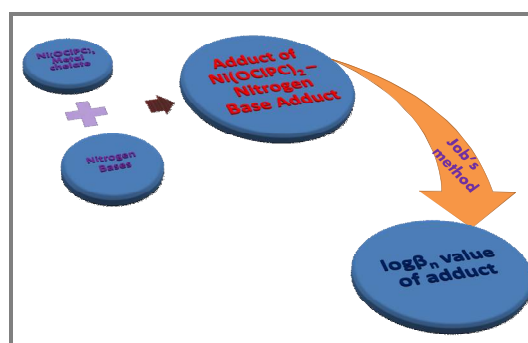
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ABSTRACT

Stability constants of adducts formed from nickel(II) di(o-chlorophenyl)carbazonate with various nitrogen bases were determined by Job's method of continuous variation at 27 ± 0.1 °C in chloroform. The impact of the substituent on the variation in the values of stability constants of adduct obtained from the reaction between nickel(II) di(o-chlorophenyl)carbazonate and nitrogen bases in a solution medium has been studied in comparison with adducts of nickel(II) diphenylcarbazonate. The results of our study were discussed by considering basicity of nitrogen bases, steric effects induced by various substituents and ring structure.

Graphical Abstract



Keywords: Steric hindrance, N ligands (nitrogen bases), Spectrophotometer, Stability constant ($\log\beta_n$), Nickel(II) di(o-chlorophenyl)carbazonate, Adduct.