Synthesis, charectarization of Schiff base 2-(2-(quinolin-2 ylmethylene) hydrazinyl) benzo[d] thiazole derived from 2-aminobenzothiazole and thier antibactirial activity

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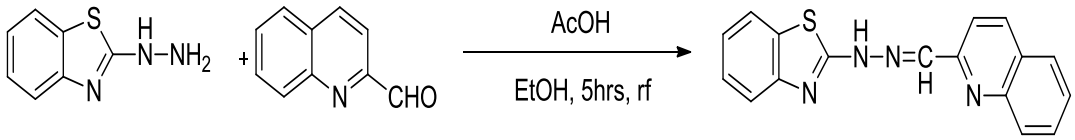
Abstract: Reaction of 2-hydrazinylbenzo[d]thiazole with 2-formylquinolin-7-ylium afforded Schiff base as 2-(2-(quinolin-2-ylmethylene)hydrazinyl)benzo[d]thiazole. These compounds have been further used for complexation reactions to obtain Co(II) and Ni(II) chelates. These chelates, of the type $[M(L)_2]Cl_2$, have been characterized by physical, spectral, and analytical data. The Schiff bases act tridentately and their metal complexes are proposed to possess an octahedral geometry about the central metal ion. These compounds have been screened for antibacterial properties against the pathogenic species *Escherichia coli, Staphylococcus aureus*, and *Pseudomonas aeruginosa*.

Scheme:



Key words: 2-formylquinolin-7-ylium, 2-hydrazinylbenzo[d]thiazole, 2--(2-(quinolin-2-ylmethylene)hydrazinyl)benzo[d]thiazole, Anti bacterial activity