

Title: Preparation, Characterization, and Biological evaluation of a Co(II), Ni(II), and Cu (II) Complex with substituted 2-amino benzothiazole with 4- hydroxy coumarine

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Abstract

The present work describes the synthesis of heterocyclic azo dyes by general diazo coupling reaction of substituted 2-amino benzothiazole with 4-hydroxy coumarine . The molecular structures of the newly synthesized compounds were confirmed by different spectroscopic techniques such as UV-Visible, FTIR, ¹H NMR, Mass and elemental analysis. The in vitro biological screenings of the synthesized compounds were tested against various microbial strains and results showed good activity compared with the standard drug. The prepared compounds ligand and its metal complexes were screened for cell toxicity against three different Human tumor cell lines like Hela, Hep G2 and

P53 by using MTT assay method.

Keywords: azo dyes, diazotization and anticancer activity..

Biography

Myself Ranjitha N, completed master degree in Industrial chemistry from Kuvempu University in 2018. And currently I am a research scholar pursuing my Ph.D under the guidance of

Dr.G Krishnamurthy who is a professor of Department of Industrial Chemistry, Sahyadri Science College, Kuvempu University, Shimoga, Karnataka, India. My research interest includes the synthesis, characterization and biological application of transition metal complexes of novel hetero cyclic compounds...