

# A Short Review on Preparation and Biological Activity of Some Metal Complexes

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**Abstract:** Schiff bases possess structural similarities with naturally occurring biological substances. This enhances their use in determining the mechanism of reaction processes in biological systems. Schiff bases have imine group containing N and O which binds with the metals and can form co-ordinate bond and results in stable cyclic structure with enhanced biological activity.

**Keywords:** Metal Complexes.

## REFERENCES

- [1]. Anju Malik, Gobind Goyat, Vikas, K.K. Verma and Sapana Garg Synthesis, Spectral and Antimicrobial Studies of Some O-Vanillin-2-aminopyridine Schiff Base Complexes of Organyltellurium(IV), Chemical Science Transactions, 2018, 7(2), 329-337
- [2]. Shailendra Pandey, and R. S. Srivastava, Anticonvulsant Activity Of Some Schiff Bases Synthesized From 2-Aminopyridine Pharmacologyonline 2: 1048-1074 (2009)
- [3]. Abdullahi O. Sobola, Gareth M. Watkins and Bernadus van Brecht, Synthesis, characterization and biological study of Cu(II) complexes of aminopyridine and (aminomethyl)pyridine Schiff bases, J. Serb. Chem. Soc. 83 (7-8) 809-819 (2018)
- [4]. Shaibu, Rafiu O. and Watkins, Gareth M., Synthesis and Spectroscopic Studies of Schiff Bases From Various Substituted Benzaldehydes And 2-Aminomethyl Pyridine, Ife Journal of Science vol. 17, no. 1 (2015)
- [5]. Aida L. El-Ansary and Nora S. Abdel-Kader, Synthesis, Characterization of La(III), Nd(III), and Er(III) Complexes with Schiff Bases Derived from Benzopyran-4-one and Their Fluorescence Study, International Journal of Inorganic Chemistry Volume 2012, Article ID 901415, 13 pages
- [6]. Mehmet Gülcan & Mehmet Sönmez, Synthesis and Characterization of Cu(II), Ni(II), Co(II), Mn(II), and Cd(II) Transition Metal Complexes of Tridentate Schiff Base Derived from O-Vanillin and N-Aminopyrimidine-2-Thione, Phosphorus, Sulfur, and Silicon, 186:1962-1971, 2011
- [7]. Malik A, Goyat G, Vikas K, Verma KK and Garg S, Coordination of Tellurium(IV) with Schiff Base Derived from o-Vanillin and 3-Aminopyridine, Int J Chem Sci. 2018;16(1):249 © 2018 Trade Science Inc.
- [8]. Devidas U. Thombal, Sunil R. Mirgane, Ram U. Ambhure, Rajendra P. Pawar, K. L. Ameta, Synthesis and Antimicrobial Study of Novel Schiff Bases and Metal Complexes, Biochemistry and Biophysics (BAB), Volume 3, 2017
- [9]. Zahid H. Chohan, Metal-based sulfonamides: Their preparation, characterization and in-vitro antibacterial, antifungal & cytotoxic properties. X-ray structure of 4-[(2-hydroxybenzylidene) amino] benzenesulfonamide, Journal of Enzyme Inhibition and Medicinal Chemistry, February 2008; 23(1): 120-130
- [10]. Ajeet Kumar Maurya, Ashish Kumar Srivastava, Nishita Chandra, Krishna Srivastava and Jagdish Prasad, Synthesis and Characterization of Mixed-ligand Copper(II) and Zinc(II) Complexes Involving pyridine-2,5-dicarboxylic acid and 1,3,5-Benzenetricarboxylic acid, Journal of Applicable Chemistry 2021, 10 (2): 168-178
- [11]. Dragoslav R. Ilić, Jelena M. Vujić, Ivana D. Radojević, Olgica D. Stefanović, Ljiljana R. Čomić, Dragić D. Banković, Srećko R. Trifunović Hem. Ind. 66 (3) 349-355 (2012)

- [12]. E. Ogbonda-Chukw , O. J. Abayeh , O. Achugasim,, O. C. Eruteya, Synthesis and antimicrobial studies of structurally related Schiff bases and their metal complexes, World Scientific News 160 (2021) 16-36
- [13]. T. I. Uzoigwe1, A. A. Osunlaja , P. N. Ndahi , O.A.Wafudu , I. Dauda, Co(II) and Zn(II) Complexes of Ciprofloxacin Imine: Physicochemical and In-Vitro Biological Evaluation, International Journal of Research and Innovation in Applied Science (IJRIAS) | Volume IV, Issue IX, September 2019
- [14]. Taghreed H AL-Noor, Amer J Jarad , Abaas Obaid Hussein, Synthesis, Characterization and antibacterial activity of mixed ligands complexes of some metal ions with 2-aminophenol and tributylphosphine. Research Journal of Pharmaceutical, Biological and Chemical Sciences · August 2017
- [15]. Festus C, Okafor SN, Ekennia AC. Heteroleptic Metal Complexes of a Pyrimidinyl Based Base Ligand Incorporating 2,2'- Bipyridine Moiety: Synthesis, Characterization, and Biological Studies. Frontiers in Chem., 2019. fchem. 2019. 00 862.