A review on Synthesis, Characterization and Biological activities of metal complexes

Akhil Saxena*

akhil.uis@cumail.in

Chandigarh University Gharuan Mohali

Abstract: In this survey we have reported a few writing overviews on the characterization and biological activities of metal complexes synthesized in different ways. The employments of metal complexes as natural movement reagents open entryway for critical investigate to be consider among the chemists to enroll important components in tackling the later issues within the living perspectives.

Keywords: Metal complex, biological activity

Introduction: Metal complexes can be utilized to form an interesting class of compounds which discover applications in essentially any branch of chemistry and innovation [1–4]. They can be tuned to a specific work by fitting alterations of either the central metal molecule or the ligand circle. These complexes may be implanted into chemical or natural frameworks and used in assorted situations [5–7]. The significant preparative, structural and reactivity ponders are moreover significant for a number of fields extending from biosciences to a more in fact oriented material science applications [8–10]. The metal complexes are an integral part of basic and utilitarian components in the human body and play a significant part in numerous forms of the physiological or neurotic pertinence [11]. These metal complexes with drugs have picked up consistently expanding significance in inorganic and therapeutic chemistry and pulled in much attention in sedate improvement procedures over the past decade [11–15].

Review of previous work:

S. No.	Metal complex	Activity
1.	Schiff base ligands obtained from the condensation of	The complexes were found to possess antioxidant and antiradical activity [16].

	methyl 2-amino-6-methyl-4,5,6,7-tetrahydrothieno[2,3-c]pyridine-3-carboxylate and methyl 2-amino-6-phenyl-4,5,6,7-tetrahydrobenzo[b]thiophene-3-carboxylate	
2.	Divalent metal complexes of Cd^{2+}, Ni^{2+}, Mn^{2+} with mixed ligands oxalate and theophylline	The complexes were found to have antimicrobial, anti-fungal and anti-bacterial activity [17].
3.	Curcumin derived Schiff base ligands obtained by the condensation of 1,7-bis-(4-hydroxy-3-methoxyphenyl)-1,6-heptadiene-3,5-dione (curcumin) with amino ethylene piperazine	The complex was found to show Anthelmintic activities and prominent cytotoxicity[18].
4.	A new series of biologically active complexes obtained from thiosemicarbazone	The complex strongly affects on the activity of ACP and ALP enzymes [19].
5.	Metal complexes of general formula $MCl_2 \cdot \mathbf{L}$ (M = Cu, Fe, Co, Mn, Zn) based on the di-(2-picolyl) amine ligand **L**	The complex acts as a polyfunctional antioxidants [20].

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