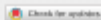


Biological response of Schiff base metal complexes incorporating amino acids – a short review

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Abstract

Metal complexes have more biological activities than their corresponding ligands. In particular, Schiff base complexes are of great interest due to their stability, electron donating ability, catalytic, photochromic, optical nonlinearity properties and biological activities. These are all based on the coordination of Schiff bases to metal ions. Amino acids are functionally involved in a number of biological processes and have coordinating sites of $-NH_2$ and $-COOH$ which are condensed with aldehydes or ketones to form Schiff bases which are easily coordinated to metal ions. Most amino acid derived Schiff bases and their metal complexes exhibit different pharmacological activities. This review focuses on the research of Schiff base complexes of amino acid derivatives from the past five years. We highlight the antimicrobial, anticancer and antioxidant responses of some Schiff base coordination compounds incorporating amino acids having nitrogen, oxygen and sulfur donors and different metal ions.

