

## NEW CARBOXYSALICYLALDEHYDE SCHIFF BASE LIGAND AND ITS COPPER(II) COMPLEXES

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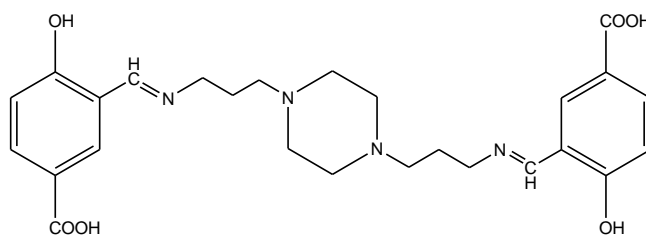
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### Abstract

Metal-organic frameworks have become a subject of great interest lately because of their interesting features and applications in the field of catalysis, magnetism and biological studies [1]. Coordination polymers are most commonly the creators of such frameworks, and researchers have devoted great effort to the design of metal-generated networks with tailored properties [2,3].

Our group has recently been involved in the development of by-design structures based on 3d metal coordination complexes derived from Schiff based ligands [4]. Salen-based complexes of 3d metals, in which the Schiff base presents the carboxy substituent on the aromatic moiety, generate infinite coordination polymers in the presence of alkaline bases [5]. In this respect, we have obtained new carboxysalicylaldehyde Schiff base ligand, namely N,N'-bis(5-carboxy-salicylidene-aminopropyl)piperazine (CBPP), characterized by NMR and FTIR spectroscopy and TG analysis. Copper(II) complexes of CBPP were synthesized by direct or template synthesis, isolated and characterized by FTIR; preliminary results suggest the formation of polymeric structures.



**Fig. 1.** CBPP structure

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