

## عنوان مقاله:

Water soluble ionic  $Ni_2L_2(OH)(Cl)$  and  $Cu_2L_2(OAC)_2 \cdot 4H_2O$  Schiff base Complexes (L= 5-methyl 1-methylbenzimidazoliumsalicylimine ethylene N, N- dimethyl amine- chloride): Synthesis and Characterization

## محل انتشار:

بیست و یکمین سمینار شیمی معدنی انجمن شیمی ایران (سال: 1398)

تعداد صفحات اصل مقاله: 1

## نویسندگان:

Bitafsha - School of Chemistry, Damghan University, Damghan, ۳۶۷۱۵-۳۶۴, Iran

Gholamhossein Grivani - School of Chemistry, Damghan University, Damghan, ۳۶۷۱۵-۳۶۴, Iran

## خلاصه مقاله:

During the last decades the Schiff base chelating ligands or azomethine compounds that are synthesized by reaction of a primary amine and a carbonyl group (aldehyde or ketone) played central role in development of coordination chemistry [1]. They can bind to metal ions and form metal complexes with different properties [2]. Water soluble Schiff base ligands and complexes are rare in literature. Thus in this study we report the synthesis and characterization of two new ionic metal complexes of  $Ni^{2+}$  and  $Cu^{2+}$  containing the Schiff base ligand of 5-methyl 1-methylbenzimidazoliumsalicylimine ethylene N, N- dimethyl amine- chloride. By reaction of the N-methyl benzimidazole and chloromethylsalicylaldehyde and then by KPF<sub>6</sub>, the benzimidazolium methyl salicylaldehydehexafluorophosphate was synthesized. It was reacted by N, N-dimethyl ethylene diamine to synthesis of three dentate Schiff base ligand (L). The reaction of L with  $Cu(OAC)_2$  and  $NiCl_2 \cdot 6H_2O$  resulted to synthesis of the  $Cu_2L_2(OAC)_2 \cdot 4H_2O$  and  $Ni_2L_2(OH)(Cl)$ . The Schiff base ligand and related complexes were characterized via (different analytical and spectral methods (CHN, FT-IR, UV-vis).

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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