

ÖZET

İMİNOOKSİMLİ SCHİFF BAZLARININ SENTEZİ VE GEÇİŞ METAL KOMPLEKSLERİNİN İNCELENMESİ

UÇAN, Selma Yıldırım Niğde Üniversitesi Fen Bilimleri Enstitüsü Kimya Anabilim Dalı

Danışman : Doç. Dr. Bedrettin MERCİMEK

Ağustos, 2002, 110 sayfa

Bu çalışmada glikş maddesi olarak 2-asetilnaftalin kullanıldı. 2-Asetilnaftalin sodyum etoksitli ortamda n-bütülnitrit ile nitrozolanarak izonitroso-2-asetilnaftalin elde edildi. İsonitroso-2-asetilnaftalinin farklı aminler (metilamin, benzilamin, 1,2-diamino-propan ve etilendiamin) ile reaksiyonlarından dört yeni ligand; metiliminoisonitroso-2-asetilnaftalin, benziliminoisonitroso-2-asetilnaftalin, 1,2-propilimino-bis(isonitroso-2-asetilnaftalin) ve 1,2-etilimino-bis(isonitroso-2-asetilnaftalin) sentezlendi. Schiff bazlarının Ni(II), Cu(II), Co(II), Zn(II), Cd(II) ve Hg(II) asetat tuzları ile 24 kompleksi sentezlendi. Sentezlenen 28 yeni bileşğin yapıları; elemental analiz, FT-1R, ¹H-NMR, ¹³C-NMR, UV-Vis, magnetik susseptibilite ve MS yöntemleriyle aydınlatıldı.

Anahtar Kelimeler : İminooksim, Schiff baz, metal kompleksler, m

SUMMARY

SYNTHESIS OF İMİNEOXİME SCHİFF BASES AND INVESTIGATION OF THEIR TRANSITION METAL COMPLEXES

UÇAN, Selma Yıldırım Niğde University Graduate School of Natural and Applied Science Department of Chemistry

Supervisor : Doç. Dr. Bedrettin MERCİMEK

Agust2002, 110 pages

In this work 2-acetylnaphthalene was used as a starting material. Isonitroso-2-acetylnaphthalene has been isolated through the nitrosation reaction between 2-acetylnaphthalene and butylnitrite in sodium ethoxide medium. Isonitroso-2-acetylnaphthalene was reacted with different amines (methylamine, benzylamine, 1,2-diaminopropane and 1,2-diaminoethane). As a result of these reactions, four new ligands; methyliminoisonitroso-2-acetylnaphthalene, benzyliminoisonitroso-2-acetylnaphthalene, 1,2-propylimino-bis(isonitroso-2-acetylnaphthalene) and 1,2-ethylimino-bis(isonitroso-2-acetylnaphthalene) were synthesized. The complexes of Schiff bases were synthesized by Ni(II), Cu(II), Co(II), Zn(II), Cd(II) and Hg(II) acetate salts. As a conclusion of above work, four different ligands and their complexes were characterized by elementary analysis, IR, ¹H NMR, ¹³C-NMR, MS, UV-Vis ve Magnetic Susceptibility spectroscopy.

Key Words: imineoxime, Schiff Base, Metal Complexes IV