**Nanostructured surfaces**

**SUBSTITUTE HYDRAZO GLYOXIME AND**

 **Cu(II), Ni(II), Co(II) COMPLEXES**

**Arjan A. HAMEED, İbrahim KARATAŞ**

*Selçuk University, Faculty of Science, Department of Chemistry, Konya, TURKEY*

*arjankimya@gmail.com*

 In this study, the first compound (4-methoxybenzylidene hydrazine) was synthesized from 4-anisaldehyde with hydrazinehydrate condensation reaction. The second compound (chlorobiphenylglioxime) was prepared like literature. The third compound((1,2)-1-([1,1'-biphenyl]-4-yl)-2-4-methylstyryl) diazenyl)ethane-1,2-dione dioxime) was then prepared from the reaction of the first and second compounds, as shown in the reaction[1,2].



 The purpose of the research was to introduce the minerals into the third compound and obtain the required complex, as shown in the reaction1]. As shown in the figure below, study the physical properties of the material as well from the color and boiling point and compare them with the results in the preparation of complex chemical compound where the experiment was repeated seven times. Three metals were used to prepare the complex and under similar conditions[3].



1. *Uçan H.İ. ve Mirzaoğlu R*., Synthises and complexes Formation of six New Unsymmetrical vic-dioximes// Synth. React. Inorg. Met. Org. Chem.-1990.- **20**, 437-449.

2. *Coogan, N.T. Chimes, M.A.,. Raftery ,J., Mocilac, P, and Denecke, M.A.* Regioselective Synthesis of V-Shaped Bistriazinyl-phenanthrolines// J. Org. Chem.-2015.- **80**, 8684-8693.

3*. Koçak, N.,Sahin, M. and Ucan,H.I*., The synthesis of two new isonitrosoacetophenone derivatives and investigation of their Ni (II), Co (II), Cu (II), and Zr (IV) complexes// Russ. J. Inorganic Chem.-2012-**57-** 1227-1231.