

Synthesis and adsorption on the gold surface di(4-(2-hydroxy-benzalimino)phenyl)-disulfide and its complexes with Co(II) and Cu(II)

© Elena K. Beloglazkina,^{*+} Anastasia N. Chernysheva,^{*} Ksenia I. Tischenko,^{*}

Anna A. Moiseeva, Valentina D. Dolzhikova, and Nikolay V. Zyk

Chair of Organic Chemistry. M.V. Lomonosov Moscow State University. Chemistry Department.

Leninskie gory, 1/3. Moscow, 119991. Russia. Phone: +7 (495) 939-40-20. E-mail: bel@org.chem.msu.ru

^{*}Supervising author; ⁺Corresponding author

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Abstract

Di(4-(2-hydroxy-benzalimino)phenyl) disulfide (**1**) has been synthesized by the reaction of salicylaldehyde and 4,4'-diaminodiphenyl disulfide with a yield of 98%. The complexation of the compound **1** with cobalt(II) and copper(II) chlorides and acetates has been investigated. Electrochemical studies of the prepared ligand and its chlorinated complexes by cyclic voltammetry have been made. The possibility of adsorption of the compound **1** on the gold surface and the formation of Co(II) and Cu(II) complexes with adsorbed ligand has been demonstrated by the contact angle of water droplets measurement.