



Some Transitional Metal Ion Complexes With 2,2'-{1,1'-Bi(Ferrocene-2,4-Dien-1-yl) -2,2'-Diylbis[Nitrilo(E)Methylylidene]}Bis(4-Chlorophenol) and Antimicrobial Activity

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ABSTRACT

The synthesis, structure, physico-chemical investigation and antimicrobial biological studies of some Mn(II), Co(II), Ni(II), Cu(II) Rh(II) and Pd(II) complexes of 2,2'-{1,1'-bi(ferrocene-2,4-dien-1-yl)-2,2'-diylbis [nitrilo (E) methylylidene]} bis(4-chlorophenol) compounds are described. Organometallic schiff base compounds, which are defined as metal complexes containing at least one direct, covalent metal-carbon bond. Several types of Organometallic Schiff base compounds have been prepared and characterized by using some physical techniques, in terms; elemental analysis, TGA/DTA, electronic spectra, ESR, Electron spin resonance and SEM. The elemental analysis data exhibit the formation of 1:2 [M: L] complexes. The molar conductance values reveal a non- electrolytic in nature. These complexes were also tested for their in vitro antimicrobial activities against some bacterial strains to assess their inhibiting potential and the activities shown by these complexes were compared with bacteria.

Keywords: Organometallic Schiff bases compounds, antimicrobial activity, IR, TGA/DTA, Electronic Spectra, ESR and SEM.
