



## **Journal of Applicable Chemistry**

2014, 3 (1): 157-163

(International Peer Reviewed Journal)



### **Synthesis, Spectral Characterization, Theoretical Evaluation Of New Co(II) And Mn(II) Complexes Of Flavone**

**Omar H. Al-Obaidi**

Chemistry Department, Education College for Women, Al-Anbar University, Ramadi, **IRAQ**

Email: [dromaralobaidi@yahoo.com](mailto:dromaralobaidi@yahoo.com)

Accepted on 28<sup>th</sup> December 2013

---

#### **ABSTRACT**

*A new series of Co(II) and Mn(II) complexes with the flavone ligand were prepared and spectroscopic method and elemental analysis verified their structures. All the prepared complexes have been identified by available spectroscopic tools (UV-Visible and IR) in addition the structure of complexes was characterized by magnetic moments and molar conductance in DMSO solution. From the above of these studies and measurements suggest an octahedral geometry around Co(II) and Mn(II). A theoretical treatment of the formation of complexes in the gas phase was studied, This was done using the HYPERCHEM-6 program for the Molecular mechanics and Semi-empirical calculations.*

**Keywords:** Flavone, metal complexes, Synthesis, Spectral, Theoretical Evaluation.

---