

Synthesis and characterisation of new Cu(II) and Mn(II) complex compounds with phenothiazine derivative with biological properties

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Abstract The phenothiazine derivatives are well known for their biomedical action on the human body, and there are many phenothiazine drugs used in treatment of different diseases. The literature points out that the action of phenothiazine derivatives is based on the complexing effects on the metallic ions, which could explain the drug action mechanism. This paper is referring to the separation and characterization of Mn(II) and Cu(II) complex compounds with phenothiazine derivatives.

The formulas of complexes, $[MLCl_2(OH_2)_2]$, were established by means of elemental chemical analysis, molar electrical conductivity, EPR and IR spectra. The antibacterial activity of these complex compounds was confirmed by experimental research.

Keywords: Mn(II) and Cu(II) complex compounds, phenothiazine derivatives, EPR and IR spectra, antibacterial activity.
