



**STRUCTURAL STUDIES OF AS (III), SB (III) AND BI (III) METAL IONS WITH 4-[(E)-(2-HYDROXYBENZYLIDENE) AMINO]-6-METHYL-3-THIOXO-3, 4-DIHYDRO-1, 2,4-TRIAZIN-5(2H)-ONE.**

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### Abstract

The complexes of As(III), Sb(III) and Bi(III) with 4-[(E)-(2-hydroxybenzylidene)amino]-6-methyl-3-thioxo-3,4-dihydro-1,2,4-triazin-5(2H)-one (LH) of compositions MLCI<sub>2</sub> [M = AS(III), Sb(III) and Bi(III)] and MLI<sub>2</sub> [M = AS(III), Sb(III) and Bi(III)] have been synthesized in dry methanol. The bonding of halogen and ligand molecules has been suggested from the electrical conductance and infrared spectra studies. The electronic spectral studies have shown strong charge transfer absorption in visible region. The deprotonation of phenolic oxygen has been substantiated with disappearance of  $\nu(\text{OH})$  frequency in IR spectra of complexes.

**Keywords;** As(III), Sb(III) and Bi(III), 4-[(E)-(2-hydroxybenzylidene)amino]-6-methyl-3-thioxo-3,4-dihydro-1,2,4-triazin-5(2H)-one complexes.