MS35-P19 | Cube Vs Dimer: Peculiarities Of Crystal Structure Of Cu2i2- And Cu4i4-Complexes Of 10-(Aryl)Phenoxarsines And 10-(Aryl)Phenarsazines

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The complexes of copper (I) halides have been of great interest due to the large variety of their photophysical properties associated with the ability of copper (I) halides to form various types of structures [1]. The composition and structure of the complexes depend on the geometry and steric factors of the ligand, type of solvent and ligand to metal ratio [2]. It is known that the Cu4I4 clusters with various pnictogen ligands demonstrate luminescent properties [3,4].

Cubic complexes exhibit intense green solid-state luminescence under UV irradiation.

This report is devoted to analysis of crystal structure of Cu (I) iodide complexes of 10-(aryl)phenoxarsines and 10-(aryl)phenarsazines with a tetrameric (cubic) Cu4I4-core and dimeric Cu2I2-core.

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