

## Hierarchical structure by X-ray Diffraction of new open frame-work

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### Abstract

Compound based on tin have a great deal of attention especially inorganic-organic hybrid materials [1,2] due to their potential application in many areas industrial and agricultural importance [1] and anti-tumor activity [3] many application of organotin IV complexes have been extensively discussed by Evan [4] In our research we are focused compounds on dicarboxylate which exhibit properties that combine the functionality of the organic amine and oxalate by hydrogen bonded forming open frame work the synthetic and structural study by x-ray diffraction of the novel salt based on tin and oxalate have been prepared by soft voice method in the presence of 4-amino pyridine The crystal structure of the title compound  $2(C_5H_6N_2)[Sn(C_2O_4)_2 \cdot 2Cl]$ , have been prepared by soft voice and the structure contains two 4-amino pyridinium and one stannate(IV) dianion For an example of a related oxalato-stannate(IV) complex [2]. which coordinate by two bidentate oxalate ligands and two chloride anions in cis positions formed octahedral of the central Sn(IV) atom. The cohesion of the molecular entities is ensured by the formation of N-HO, C-HO, interactions forming open frame work. The X-ray diffraction of a single crystal of Bis 4-Amino pyridinium Cis dichloro Bis oxalate stannate(IV) showed that the unit cell is monoclinic, space group  $P2_1/n$  with  $a = 7.4025(2) \text{ \AA}$ ,  $b = 19.5040(6) \text{ \AA}$ ,  $c = 13.2793(4) \text{ \AA}$ ,  $\beta = 92.034(2)^\circ$  with  $Z = 4$  unit formulas/unit cell, the structure refinement resulted in final  $R = 0.0314$ ,  $R_w = 0.0694$  and  $G_oof = 1.056$ .

### Biography

Rima GHERIBI currently works at the Department of Chemistry, and Biochemistry, Concordia University. Rima Gheribi does research in Applied Mathematics and Analysis.

