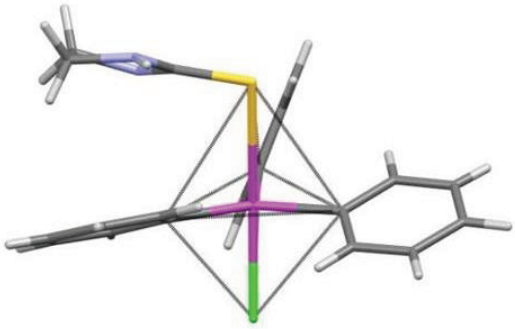
1



2

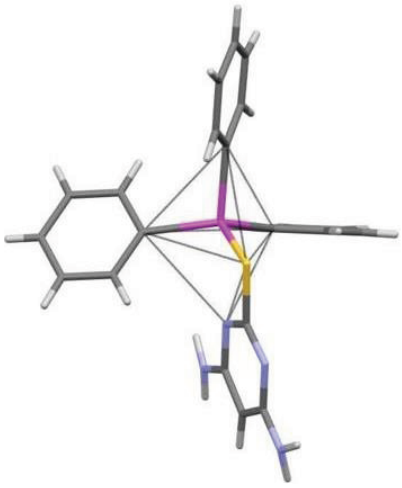


Figure 1. Coordination models of tin cations in (1) and in (2)

Keywords: X-ray crystallography, organotin(IV) complexes, heterocyclic thioamides, antitumor activity,

MS30-P19 X-ray structural analysis and catalytic properties of new thiazoline - carboxylate ruthenium complexes

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X-ray Structural Analysis and Catalytic Properties of New Thiazoline - Carboxylate Ruthenium Complexes

Heterocyclic compounds such as thiazol(in)es, thiazolidines, oxazol(in)es have received large attention. These heterocycles are of importance as pharmaceuticals and ligands for catalysis. The thiazol(in)e ring is present in many biological active natural and synthetic products. There is a great number of publications related to biological activities of thiazoline scaffold. Metal complexes of carboxylate ligands such as picolinic acid, proline, quinoline or isoquinoline carboxylic acid, thiazole or thiazolidine carboxylic acid, bipyridine carboxylic acid are known and investigated their luminescene, structural properties, biological activities [1].

In the proposed study, X-ray diffraction analysis of Ruthenium complexes were performed using an Agilent Diffraction Xcalibur diffractometer equipped with an Eos-CCD detector. Data were absorption-corrected within the CrysAlis program [2]. Structures were solved by SHELXS-97 and refined by means of SHELXL-97 programs [3] incorporated in the OLEX2 program package [4]. Their catalytic activities were evaluated for ATH. These catalyst systems showed excellent activity for a range of ketone and aldehyde substrates tested. Attempts to obtain enantioselective products by lowering the temperature or increasing the catalyst loading, failed the *ee* values. In this work, high yields were obtained in the transfer hydrogenation reaction.

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Keywords: Thiazoline, Ruthenium complexes, Crystal structure, Catalytic analysis