



Hypercoordinated Organotin Compounds

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Message from the Guest Editor

Dear Colleagues,

Organotin (IV) compounds possessing flexible or rigid chelating organic ligands with O, N, S, and P donor groups capable of coordination interactions have been extensively investigated. A common feature of these hypercoordinated species is the expansion in the coordination sphere of tin centers facilitated by additional intra- or intermolecular coordination interactions. X-ray crystallographic evaluations of mono- and dichloro-asymmetrical hyper-coordinated stannanes and distannanes with a variety of ligand motifs reveal a 3c–4e bonding structure where the apical halide bond is elongated. DFT methods have been useful in predicting the solid-state geometries of the hyper-coordinated Sn complexes. More recently, interest in exploiting the hypercoordinated nature of tin in these small molecule species to access the first examples of light and moisture stable polystannanes has been demonstrated. This Special Issue will highlight recent developments in hyper-coordinated stannane small molecule chemistry, theoretical evaluations, and progress in the preparation of stable polystannane materials.

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Guest Editor





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Message from the Editor-in-Chief

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