Special Issue

Hypercoordinated Organotin Compounds

Message from the Guest Editor

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 hyper-coordinated species is the expansion in the coordination sphere of tin centers facilitated by additional intra- or intermolecular coordination interactions. X-ray crystallographic evaluations of monoand 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 hyper-coordinated 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.

Guest Editor

Prof. Dr. Daniel A. Foucher

Advanced Functional Materials Laboratory, Department of Chemistry and Biology, Ryerson University, Toronto, ON, Canada

Deadline for manuscript submissions

closed (31 March 2020)



Inorganics

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 4.1



mdpi.com/si/33899

Inorganics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
inorganics@mdpi.com

mdpi.com/journal/inorganics





Inorganics

an Open Access Journal by MDPI

Impact Factor 3.0 CiteScore 4.1



About the Journal

Message from the Editor-in-Chief

Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals.

Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and Inorganics offers authors the opportunity to publish exciting new research in an open access format.

Editor-in-Chief

Prof. Dr. Duncan H. Gregory

School of Chemistry, University of Glasgow, University Avenue, Glasgow G12 8QQ, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Inorganic and Nuclear) / CiteScore - Q2 (Inorganic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2025).

