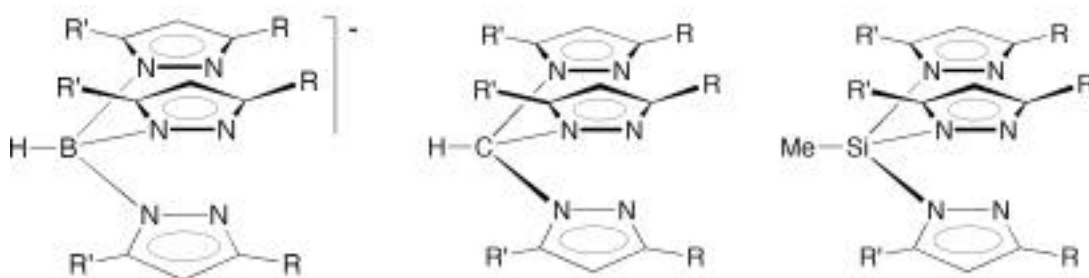


# 1. Poly(pyrazolyl)silane chemistry

The tris(pyrazolyl)borates (scorpionates) were first synthesized by Trofimenko back in the mid-1960s and are among the most popular and versatile ligands in modern coordination chemistry. Neutral analogues in which the boron atom has been replaced by carbon, the tris(pyrazolyl)methanes (Tpm), have also been known for many years. We introduced in 1999 the related tris(pyrazolyl)silane (Tps) ligands, which can be prepared in high yield and whose coordination chemistry doesn't always mimic that of their carbon counterparts. We continue to explore this new family of ligands and recent developments include the preparation of the first copper(I) Tpm derivatives and the synthesis of bidentate bis(pyrazolyl)silane (Bps) ligands.



The tris(pyrazolyl)borates (Tp), tris(pyrazolyl)methanes (Tpm), and tris(pyrazolyl)silane (Tps) ligand systems.

## Relevant publications:

“Methyltris(pyrazolyl)silanes: New Tripodal Nitrogen-Donor Ligands” Pullen, E. E.; Rheingold, A. L.; Rabinovich, D. *Inorg. Chem. Commun.* **1999**, 2, 194-196.

“Syntheses and Structures of Methyltris(pyrazolyl)silane Complexes of the Group 6 Metals” Pullen, E. E.; Rabinovich, D.; Incarvito, C. D.; Concolino, T. E.; Rheingold, A. L. *Inorg. Chem.* **2000**, 39, 1561-1567.

“Zinc Bis(pyrazolyl)silane Complexes” Richburg, L. M.; Farouq, J. A.; Incarvito, C. D.; Rheingold, A. L.; Rabinovich, D. *Polyhedron* **2000**, 19, 1815-1820.