The past ten or fifteen years have seen the development of several related symmetry and overlap based models of molecular stereochemistry. Along with perturbation theoretical ideas, molecular chemists might be exploited to produce mixed metal clusters, using the idea that \( C = M \), \( C = M \) and possibly \( M = M \) or \( M = M \) bonds would react with low valent metal complexes as do the analogous \( C = C \) and \( C = C \) linkages.

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References