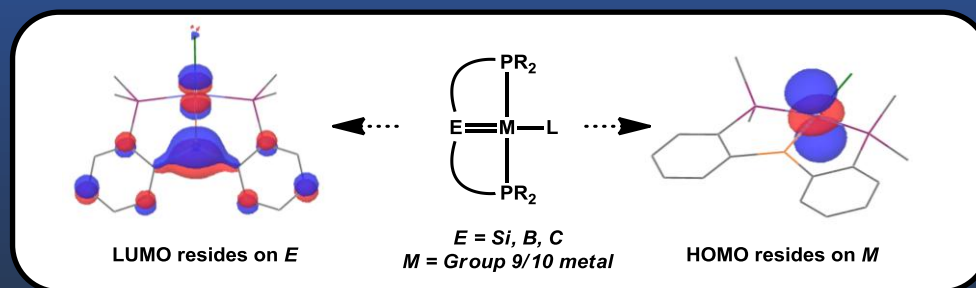


# Ambiphilic Scaffolds for Cooperative Metal-Ligand Activation of Small Molecules

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Our research focuses on the synthesis of metal complexes with multiple bonds between electropositive main-group elements and late transition metals as “ambiphilic” scaffolds containing adjacent Lewis acidic and Lewis basic sites.



We have made progress toward elucidating the coordination chemistry of a new bis(phosphine) dihydrosilyl pincer ligand (*right*) to use in these complexes. We have also pursued the synthesis of a related *N*-heterocyclic silyl pincer ligand (*below*) for comparison of complexes with varying degrees of acidity at Si.

