Development and Application of StackPhos, A New Chiral Biaryl Heterocyclic Ligand for Enantioselective Catalysis

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The development of new chiral ligands for enantioselective catalysis continues to be an important research area as the products impact a broad range of disciplines driven by organic synthesis. Our group has been involved in designing chiral biaryl P,N-ligands that incorporate a heterocycle into the biaryl backbone. This lecture will cover the developments in my laboratory that lead to the design and implementation of StackPhos, an imidazole-based P,N-ligand with unique ligation properties and catalytic activity.

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