

Exceptionally Simple Sulfur-Based Olefin Ligands for Broad-Scope Asymmetric Catalysis

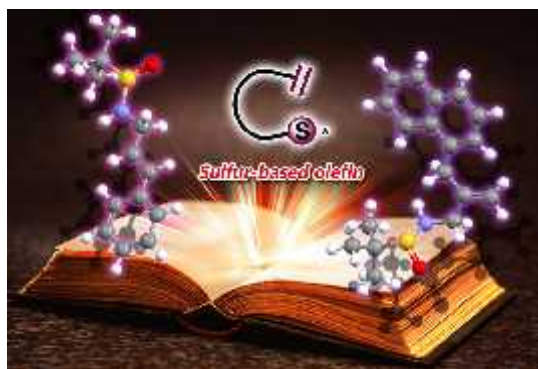
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The design of simple chiral ligands with great performance in transition-metal-catalyzed asymmetric reactions is an extremely attractive but rather challenging subject for organic synthesis and chemical & pharmaceutical industry. Despite considerable efforts over the past decades, there have been limited successes on rational design of simple chiral skeletons capable of

efficient asymmetric catalysis. Recently, we reported our discovery of a novel class of chiral sulfur-based olefin ligands (SOLs)¹ bearing exceptionally simple frameworks and their broad-scope application in a series of rhodium-catalyzed asymmetric addition to C=C, C=O and C=N double bonds.^{2,3} In this presentation, we will describe some of these progresses.



REFERENCES

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3. Xu, M.-H.; et al. Unpublished results.



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