

Category

**Metal-Catalyzed
Asymmetric
Synthesis and
Stereoselective
Reactions**

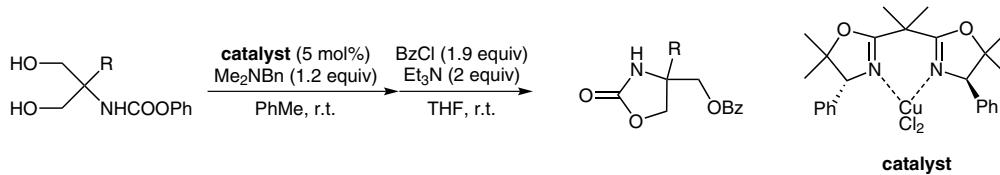
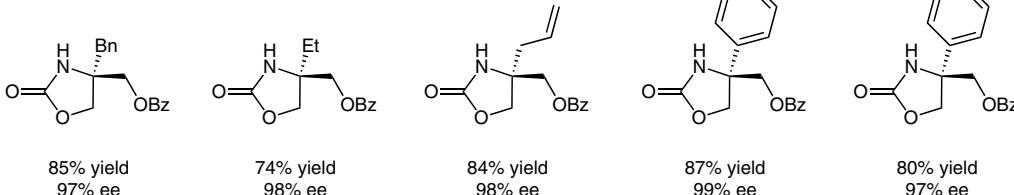
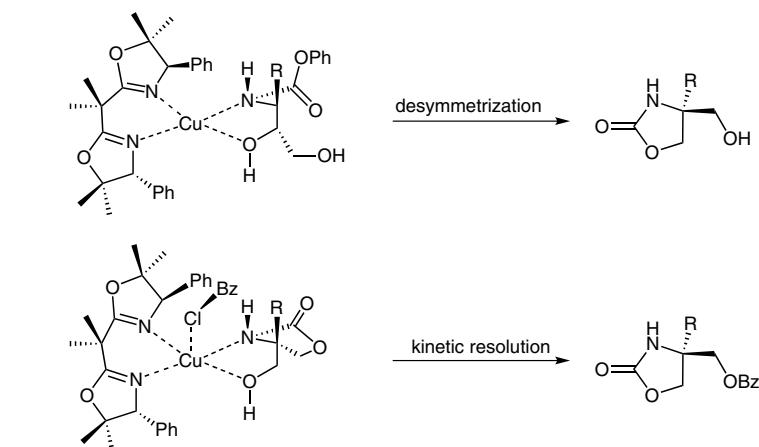
Key words

copper
desymmetrization
kinetic resolution

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Asymmetric Formation of *tert*-Alkylamines from Serinols by a Dual Function Catalyst
Chem. Commun. 2013, 49, 9669–9671.

Consecutive Intramolecular Desymmetrization and Kinetic Resolution

**Selected examples:****Proposed intermediates in desymmetrization and kinetic resolution:**

Significance: This paper describes the consecutive intramolecular desymmetrization and kinetic resolution of 2-substituted *N*-phenoxy carbonyl-serinols by using bisoxazoline- CuCl_2 . The reaction products are obtained in good yield and excellent enantioselectivities (94–99% ee).

Comment: The authors developed a unique asymmetric catalysis system using a single chiral Lewis acid catalyst, which steers two consecutive asymmetric reactions of intramolecular desymmetrization and kinetic resolution. The two successive chemical conversions became unusually enantioselective, resulting in the production of the oxazolidinone benzoates with excellent enantioselectivities, which signifies a powerful and synergistic dual function catalyst effect by a chiral catalyst.

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