Kinetic Resolution of Primary Amines through Chiral Phosphoric Acid Catalysis

Significance: The List group reports a kinetic resolution of primary amines by selective condensation with a 1,3-diketone. The reaction is catalyzed by a chiral BINOL-derived phosphoric acid. The method is applicable to both benzylamine derivatives and aliphatic substrates.

Comment: The authors demonstrated an acid-catalyzed enantioselective carbonyl–amine condensation through a kinetic resolution of primary amines. There is great potential of the observed reactivity in many other transformations.

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