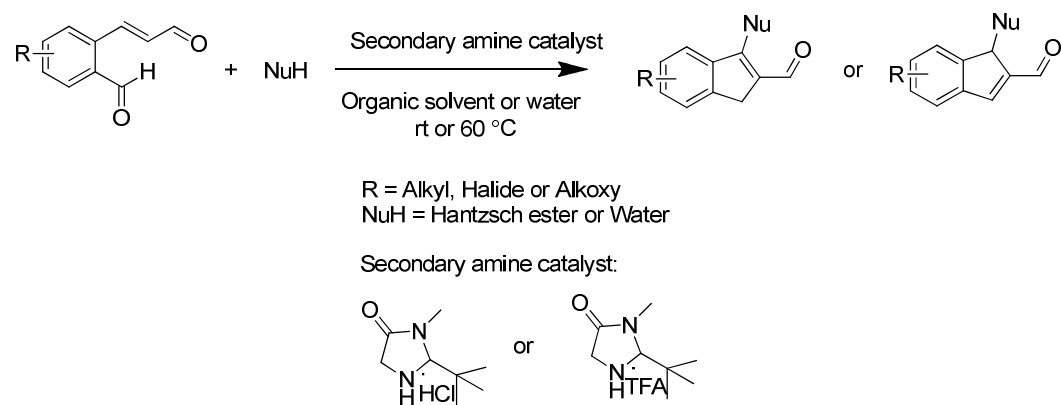


Efficient Synthesis of Indene-Aldehyde Derivatives Catalyzed by Secondary Amine Catalysts

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Substituted indene derivatives are valuable synthetic targets in organic and medicinal chemistry because of their important biological activities and applications in functional materials. These indene-based materials have shown a wide range of biological activities such as antineoplastic, anti-inflammatory, aromatase inhibitory, and cytotoxic activities. A variety of effective approaches were already reported for indene synthesis. However, many of these existing methods suffer from shortcomings including low tolerance of functionality, the necessity of expensive transition metal catalysts and harsh reaction conditions. Herein, we describe a novel method for the synthesis of various substituted indene aldehydes using secondary amine catalysts under mild reaction conditions.



Scheme 1. Formation of indene aldehyde derivatives catalyzed by secondary amine catalysts