J. DIESEL, A. M. FINOGENOVA, N. CRAMER* (ECOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE, SWITZERLAND)

Nickel-Catalyzed Enantioselective Pyridone C–H Functionalizations Enabled by a Bulky N-Heterocyclic Carbene Ligand

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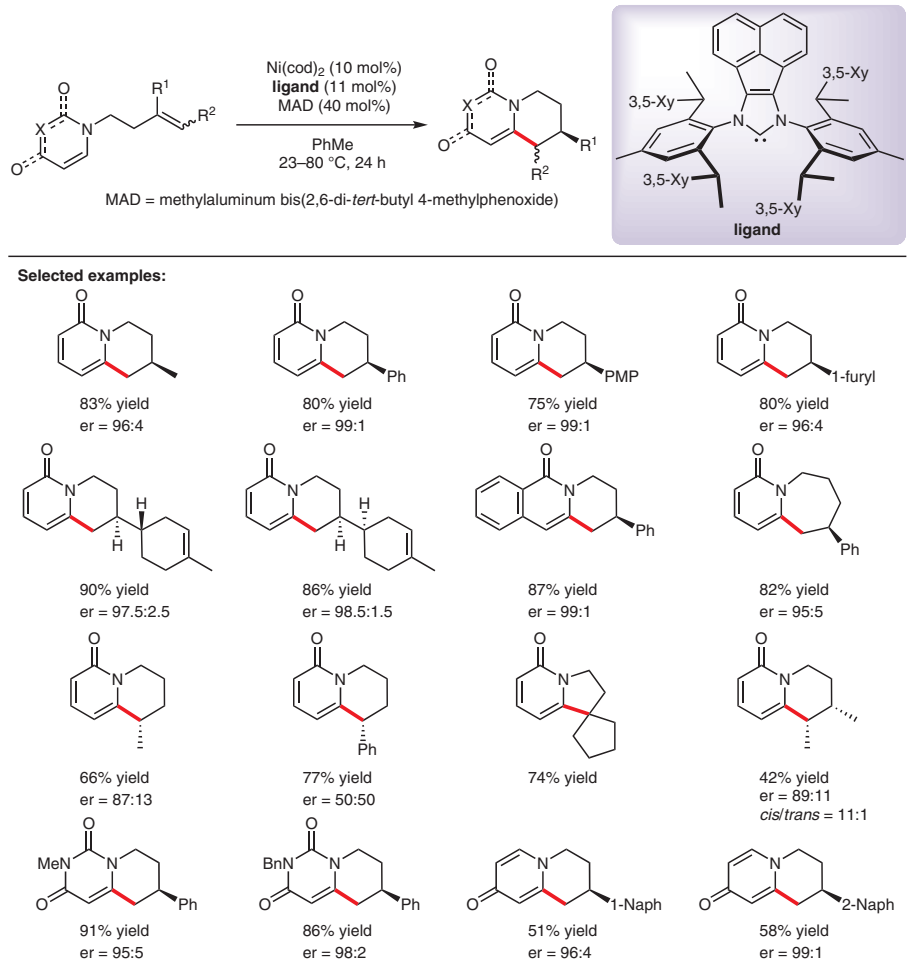
Nickel-Catalyzed Asymmetric C–H Functionalization of Pyridones



Significance: Chiral pyridone backbones can be found in many bioactive compounds. The authors have developed a nickel-catalyzed enantioselective C–H functionalization of 2- and 4-pyridones by using a bulky N-heterocyclic ligand.

Comment: This nickel-catalyzed reaction permits the enantioselective intramolecular C–H functionalization of 2- and 4-pyridones. The nickel complex, based on a chiral bulky N-heterocyclic ligand, is effective in terms of selectivity, giving chiral 2- and 4-pyridones in good yields and with high enantioselectivities.

SYNFACTS Contributors: Hisashi Yamamoto, Wataru Muramatsu
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