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# COBALT-CATALYZED AMINO ACID C(sp2)-H BOND FUNCTIONALIZATION USING ORGANIC ISOCYANIDES

*Friday, 11 February 2022 11:00 (20 minutes)*

Over the last decade, high-valent cobalt catalysis has earned a place in the spotlight as a valuable tool for C-H activation and functionalization. The use of cobalt (II) salt catalysts in combination with bidentate directing groups has been proven to be an effective strategy for various C-H bond transformations. Not only cobalt is less expensive alternative to third row noble metals, but also displays similar reactivity and regioselectivity Very recently, our group has developed a methodology for cobalt-catalyzed carbonylation of phenyl alanine derivatives employing picolinamide (PA) as a traceless directing group. We have further developed this methodology by introducing isocyanides as C-H functionalization reagents. Herein we report a novel and efficient picolinamide directed method for the synthesis of 1,2-dihydroisoquinolines via Co-catalyzed C-H functionalization of amino acid derivatives using organic isocyanides.

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