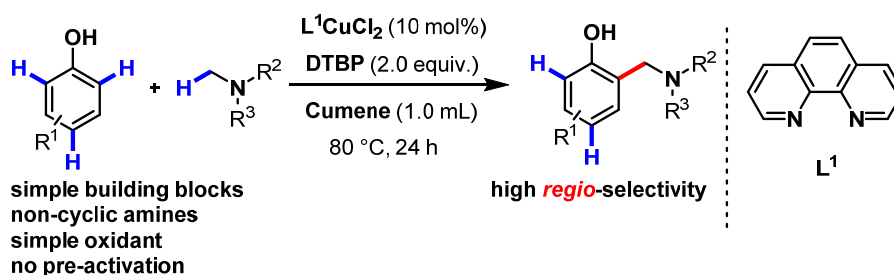


Cu(II)-CATALYZED CROSS-DEHYDROGENATIVE ORTHO-AMINOMETHYLATION OF PHENOLS

Congjun Yu, and Frederic W. Patureau

Institute of Organic Chemistry, RWTH Aachen University, 52074 Aachen, Germany

Cross-dehydrogenative couplings (CDCs) have attracted much attention in recent years because they do not require pre-activation of either coupling partners, and they are also more atom-economical. We have developed an efficient Cu(II)-catalyzed *ortho*-selective aminomethylation method of phenols by direct intermolecular CDC reaction (Scheme 1). An arguably broad variety of functional groups were moreover tolerated. This represents a rare case of C(sp²)-C(sp³) CDC with phenols. This unusual dehydrogenative process is anticipated to lead to the development of other general classes of C-C bond forming CDC reactions.[1]



Scheme 1