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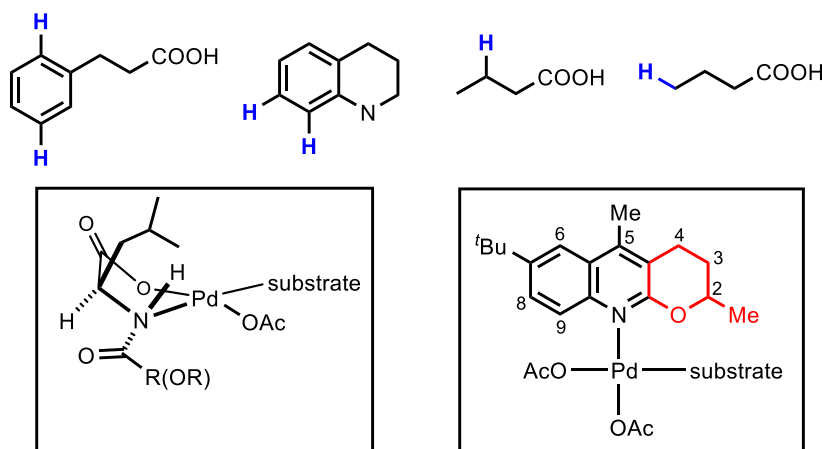
IL16 – Ligand-Accelerated C–H Activation Reactions: Distance and Geometry

Jin-Quan Yu\*

Department of Chemistry, The Scripps Research Institute, 10550 N. Torrey Pines Road, BCC-372, La Jolla, California, 92037-1000, U.S.A.

Email: [Yu200@scripps.edu](mailto:Yu200@scripps.edu)

Two different classes of novel ligands are developed to drastically accelerate Pd-catalyzed C–H activation reactions. These ligands enable the activation of C–H bonds that are near or far from a functional group, demonstrating the feasibility of achieving selectivity by recognizing the distal and geometric relationship between different C–H bonds and existing functional groups. Enantioselective C–H activation reactions are also made possible by using chiral version of these ligands, providing new disconnections for asymmetric synthesis.



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