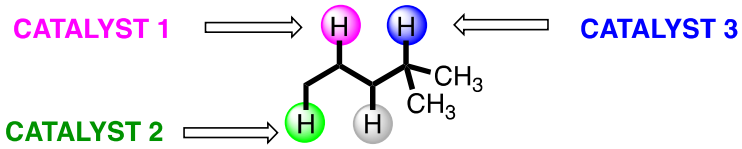
SITE-SELECTIVE AND ENANTIOSELECTIVE C–H FUNCTIONALIZATION

Davies, H. M. L.
Department of Chemistry
Emory Unniversity
USA
e-mail@addresshmdavie@emory.edu

The development of practical methods for site selective C-H functionalization is of intense current interest. This presentation will describe a collaborative approach towards achieving new C-H functionalization strategies and our recent advances in the C-H insertion chemistry of donor/acceptor-substituted carbenoids. A series of chiral dirhodium catalysts have been developed for this chemistry and they are capable of controlling which C-H bond is functionalized.[1,2] The application of these new synthetic strategies to the synthesis of natural products and pharmaceutical targets will be described.



1. Liao, K.; Negretti, S.; Musaev, D. G.; Bacsa, J.; Davies, H. M. L. *Nature*, **2016**, *533*, 230.

2. Liao, K.; Pickel, T. C.; Boyarskikh, V.; Bacsa, J.; Musaev, D.G.; Davies, H .M. L. *Nature*, **2017**, *551*, 609.