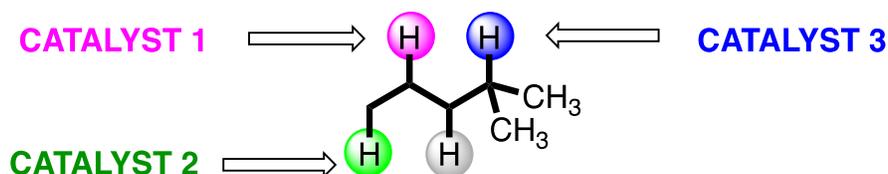


# Catalyst-Controlled Site-Selective and Enantioselective C-H Functionalization

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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.<sup>1,2</sup> The application of these new synthetic strategies to the synthesis of natural products and pharmaceutical targets will be described.



## References:

- [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.