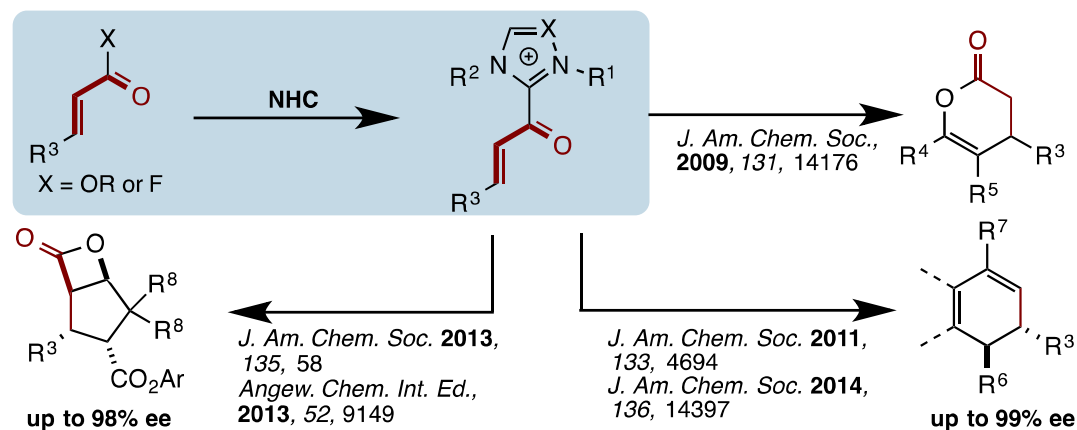


## Enantioselective *N*-heterocyclic carbene catalysis with ester substrates.

David Lupton

Monash University, Melbourne, Victoria, Australia

*N*-Heterocyclic carbenes (NHCs) are powerful catalysts for some of the most diverse chemical transformations observed in organocatalysis.<sup>1</sup> Beyond acyl anion chemistry they are active in many reactions that are acyl anion free often exploiting normal polarity intermediates.<sup>2</sup> A number of our studies in the field of NHC catalysis are focused on reaction discovery using ester, and ester surrogate, substrates. In this presentation recent discoveries in enantioselective catalysis using Lewis basic, and nucleophilic, catalysts will be discussed



1. Enders, D.; Niemeier, O.; Henseler, A. *Chem. Rev.* **2007**, *107*, 5606.
2. Ryan, S. J.; Candish, L. Lupton, D. W. *Chem. Soc. Rev.* **2013**, *42*, 4906.