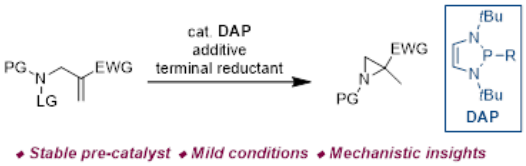
# Aziridines via 1,3,2-Diazaphospholene-Catalyzed *aza*-MIRC

J. Klett[1], N. Cramer[1]*

[1]Institute of Chemical Sciences and Engineering (ISIC) EPFL SB ISIC LCSA, BCH 4305

1,3,2-diazaphospholenes hydrides (DAP-Hs) are highly nucleophilic organic hydrides which can act as main-group catalysts for a range of attractive transformations.[1] Herein, we report a DAP-catalyzed *aza*-Michael Induced Ring Closure (MIRC) to access aziridines under mild conditions. A broad range of Michael acceptors were tolerated and preliminary investigations showed even the potential use of chiral DAP catalysts to access enantioenriched aziridines.




◆ *Stable pre-catalyst* ◆ *Mild conditions* ◆ *Mechanistic insights*

[[1]] a) J. H. Reed, J. Klett, C. Steven, N. Cramer, *Org. Chem. Front.* **2020**, *7*, 3521; b) A. W. H. Speed, *Chem. Soc. Rev.* **2020**, *49*, 8335; c) D. M. C. Ould, R. L. Melen, *Chem. Eur. J.* **2020**, *26*, 9835; d) J. Zhang, J.-D**. Yang**, J.-P. Cheng, *Natl. Sci. Rev.* **2021**, *8*, DOI:10.1093/nsr/nwaa253.