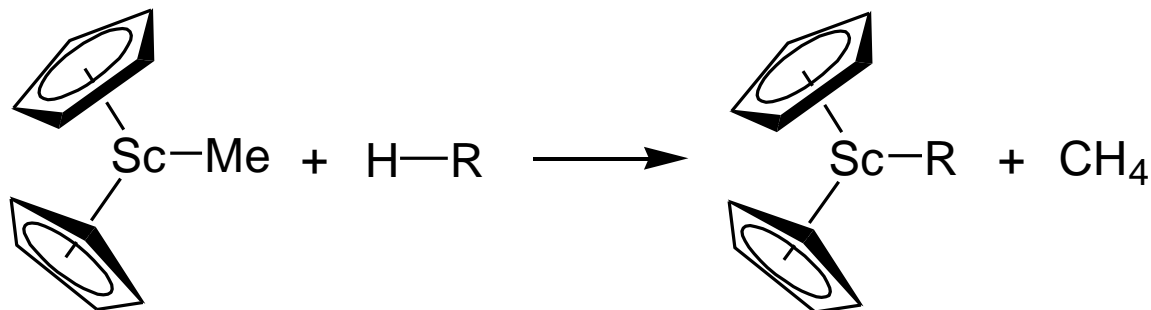
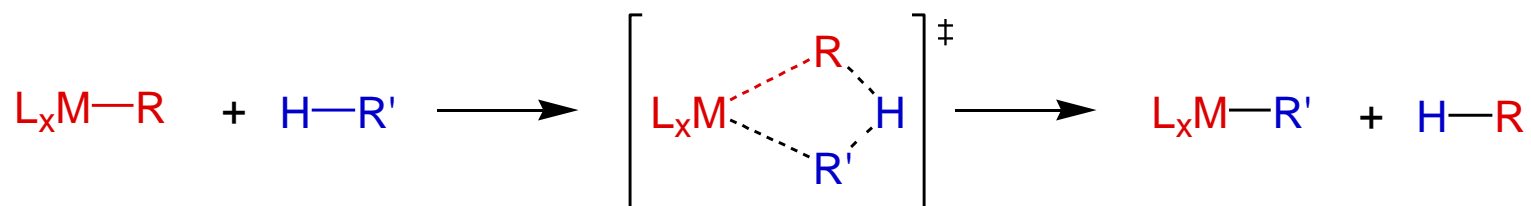


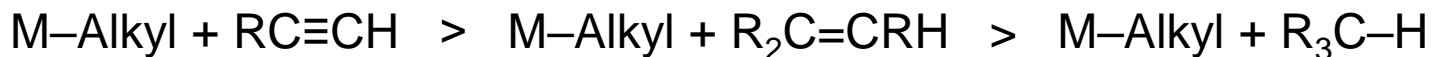
SIGMA-BOND METATHESIS



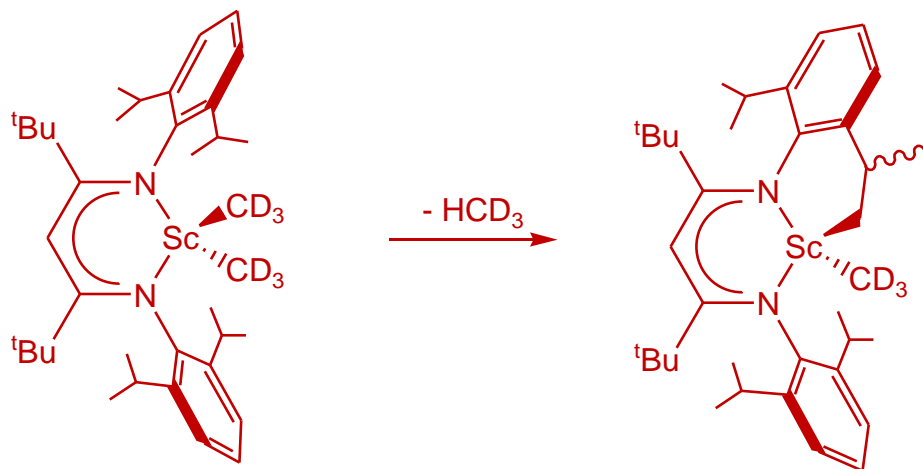
- d^0 Metal, so cannot occur by OA, then RE
- σ -Bond Metathesis discovered in 1987 by John Bercaw at Caltech



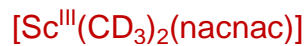
- Very common for metals without an accessible oxidation state 2 units higher
- Order of reactivity (greater reactivity with higher s-character in R-H bond):



SIGMA-BOND METATHESIS



σ -Bond Metathesis often occurs intramolecularly \rightarrow (cyclo)metallation



σ -Bond Metathesis

OA followed by RE

