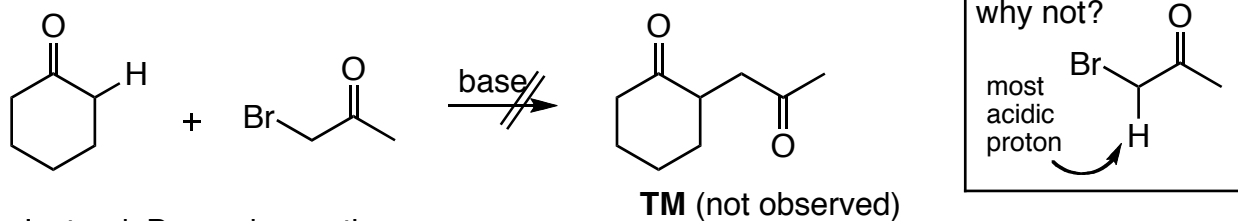


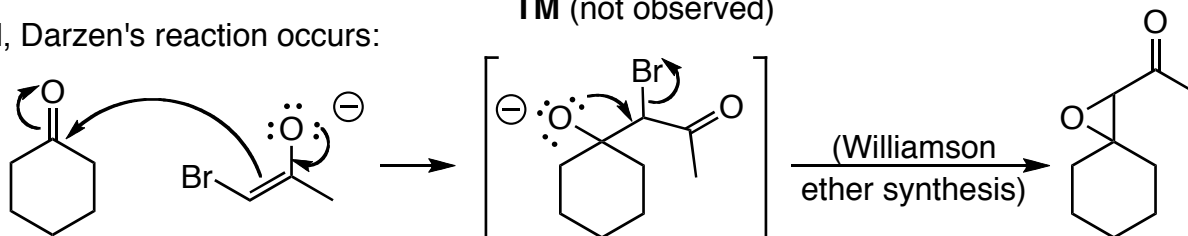
CHM 422 Organic Synthesis, Dr. Laurie S. Starkey

Formation of Enolates: Regiocontrol & Selectivity

Consider the following alkylation reaction:

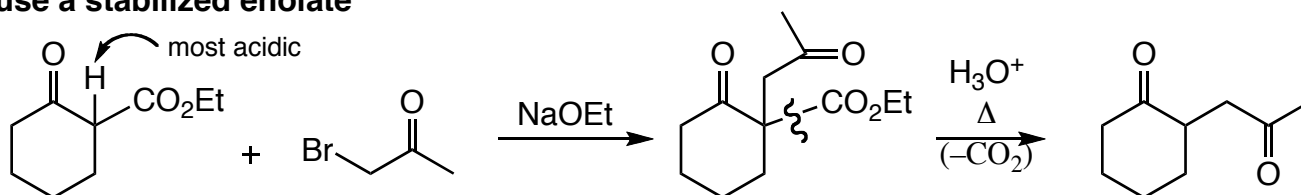


Instead, Darzen's reaction occurs:

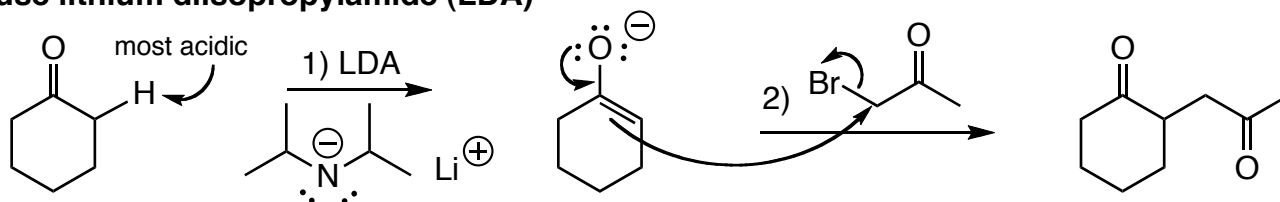


We need to **control** the enolate formation. Several methods are available (Willis/Wills, Ch 6.5):

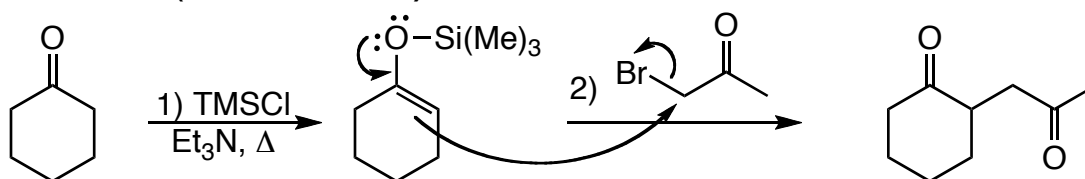
use a stabilized enolate



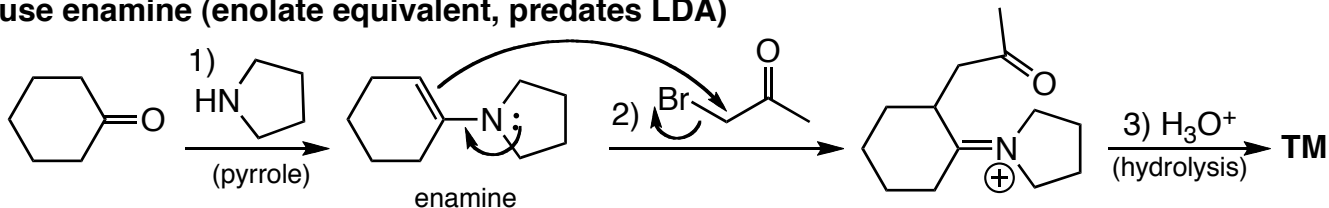
use lithium diisopropylamide (LDA)



use silyl enol ether (TMS enol ether)



use enamine (enolate equivalent, predates LDA)



use Reformatsky reaction

