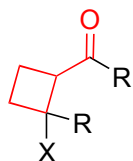


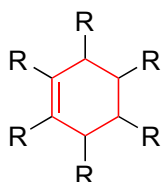
Structure Motifs and Associated Name Reactions

Bonds and Atoms highlighted in color refer to the corresponding keying-element
(this list is only meant as a guideline, alternate reactions may lead to identical structures)

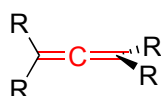
Structure: Name Reaction:



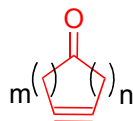
De Mayo Cycloaddition
(when X = OH, 1,5-diketones
can be formed through retro-Aldol)



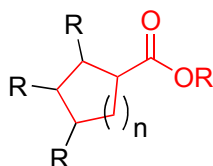
Diels-Alder,
Ring-Closing
Metathesis



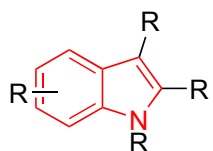
Doering-LaFlamme
Allene Synthesis,
S_N2' on propargyl alcohols



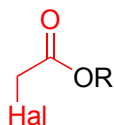
Eschenmoser-
Tanabe-Fragmentation



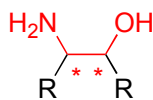
Favorskii-Rearrangement



Fischer Indole Synthesis



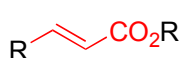
Hell-Volhard-Zelinsky Reaction



Henry Reaction/Reduction,
Sharpless Aminohydroxylation
(* = chiral)



Hofmann-Löffler-Freytag Reaction
[2+3]-Azomethine Cycloaddition

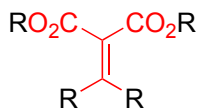


Horner-Wadsworth-Emmons
Reaction

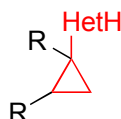


Hunsdieker Reaction
S_N2

Structure: Name Reaction:



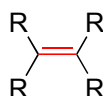
Knoevenagel Reaction



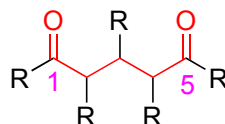
Kulinkovich Reaction
Het = NR, O



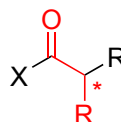
Mannich Reaction



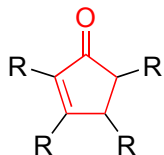
McMurry Reaction,
Peterson Olefination,
Corey-Winter-Olefination,
Julia (and Modifications) Reaction,
Takai-Utimoto Reaction,
Wittig Reaction,
Honer-Wadsworth-Emmons
Reaction



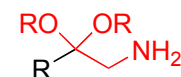
Michael Addition



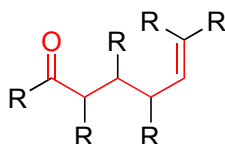
Evans Alkylation,
Myers Alkylation
(* = chiral)
X = auxiliary or H, R, OR



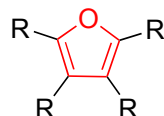
Nazarov Reaction,
Pauson-Khand Reaction



Neber Reaction



Oxy-Cope Reaction



Paal-Knorr Furan Synthesis