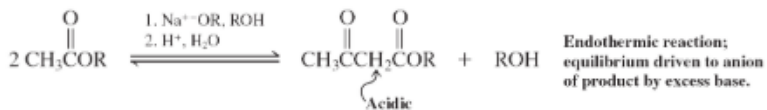


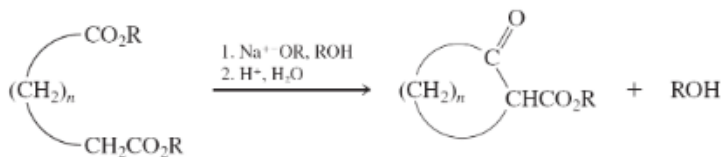
New Reactions

Synthesis of β -Dicarbonyl Compounds

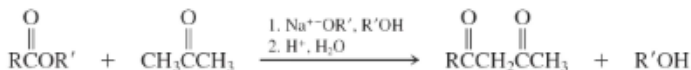
1. Claisen Condensation ([Section 23-1](#))



2. Dieckmann Condensation ([Section 23-1](#))



3. β -Diketone Synthesis ([Section 23-1](#))

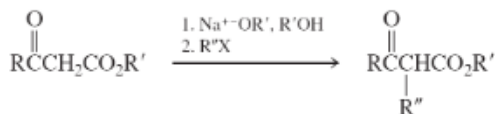


Intramolecular

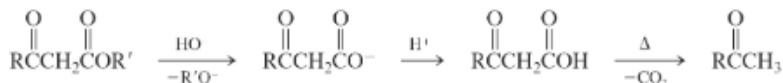


3-Ketoesters as Synthetic Building Blocks

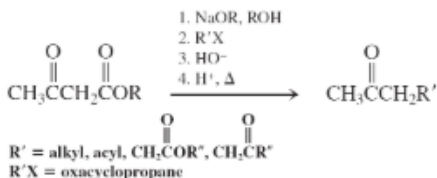
4. Enolate Alkylation ([Section 23-2](#))



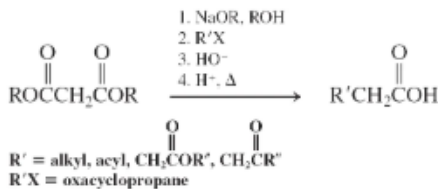
5. 3-Ketoacid Decarboxylation ([Section 23-2](#))



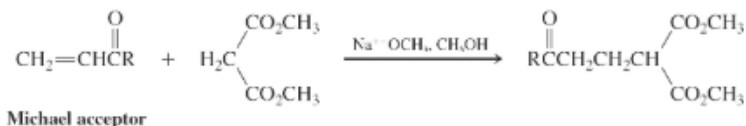
6. Acetoacetic Ester Synthesis of Methyl Ketones ([Section 23-2](#))



7. Malonic Ester Synthesis of Carboxylic Acids ([Section 23-2](#))



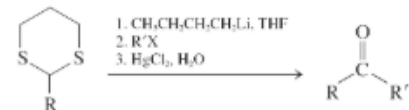
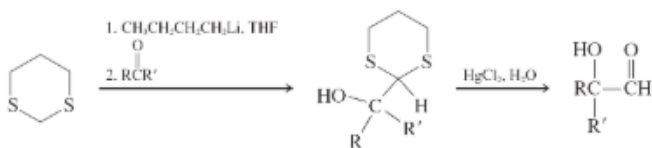
8. Michael Addition ([Section 23-3](#))



9. 1,3-Dithiacyclohexane (1,3-Dithiane) Anions as Acyl Anion Equivalents ([Section 23-4](#))



A = electron-withdrawing, conjugating, or polarizable group



10. Thiazolium Salts in Aldehyde Coupling ([Section 23-4](#))

