

UNIT 12 – CONJUGATION

OCSL: None

VTOC: [Dienes](#)

[Addition Reactions](#)

[Diels-Alder Cycloaddition](#)

[Practice Problems](#)

UCalg: Conjugation [Overview](#)

Dienes

[Types of dienes and stabilities](#)

[Bonding](#)

[Reactions \(overview\)](#)

[Addition of Hydrogen Halides](#)

[The Diels-Alder reaction](#)

[Sample Problems](#) (skip Q1)

UCDavis: [Conjugated Dienes](#)

[Electrophilic Attack on Conjugated Dienes-Kinetic and Thermodynamic Control](#)

[The Diels-Alder Cycloaddition](#)

Note: Kinetic vs Thermodynamic Control will be covered 246 Lab only. You must predict 1,2 and 1,4 products, but you do not have to predict which will dominate at different temperatures.

Skills:

12A. Identify groups of conjugated atoms.

12B. Predict the 1,2 and 1,4 products of addition of HX to symmetric and asymmetric conjugated dienes.
Draw the mechanism for their formation.

12C. Predict the products of the Diels-Alder reaction including stereochemistry.

12D. Recognize factors that effect rate of the Diels-Alder reaction.