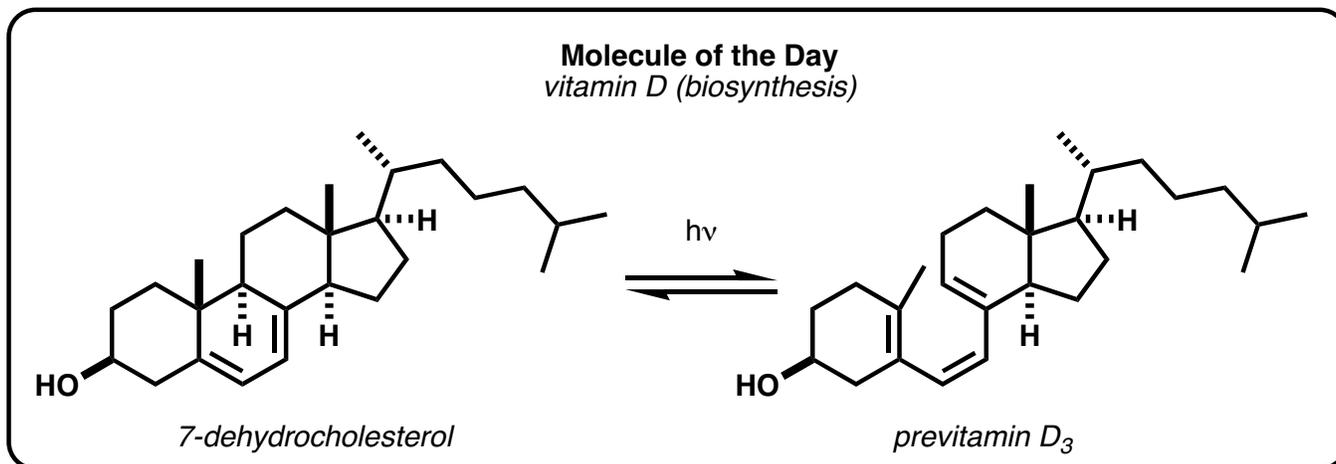


Notes for Lecture #16

Electrocyclic Reactions

Definition: A pericyclic reaction in which **1** conjugated, overlapping array of orbitals **combines**. Electrocyclic reactions proceed by way of a **cyclic transition state**, and **1 sigma bond** is formed during the course of the reaction.

Conrotatory: Orbitals rotate in the same direction (both clockwise or both counter-clockwise)

Disrotatory: Orbitals rotate in opposite directions (one clockwise, one counter-clockwise)

Woodward-Hoffmann Rules for Electrocyclic Reactions

# Electrons	Stereochemical Course	
	Thermal Mode	Photochemical Mode
4n + 2	disrotatory	conrotatory
4n	conrotatory	disrotatory