Introductory Organic Chemistry - II
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Lecture 45
Weekly Intro -7

Welcome, in this week we will be looking at an important reaction of carbonyl compounds, which is the conjugate addition. So here you have an α, β-unsaturated carbonyl compound, which can react in two ways; it can do a 1, 2-addition, or it can do a 1, 4-addition. So, we will be looking at in some detail about how to understand these two reactions from a thermodynamic or even kinetic standpoint. And try to figure out whether we can push the reaction conditions such that it goes to either 1,2-addition, or 1, 4-addition.

We will also be looking at some of the aspects of how to make enol equivalents, such as the silyl enol ether, and figure out how to activate the silyl enol ethers to do alkylation reactions. Lastly, we will be looking at some of the name reactions in the series which includes the Claisen ester condensation and so on. So, this week we will cover extensively the reactions of carbonyl compounds as far as 1,2-addition, 1, 4-addition, trying to figure out if we can control the alkylation reactions and so on.