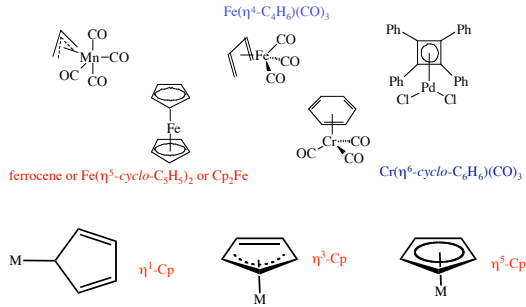


### Complexes of Other $\pi$ -Ligands

Nomenclature: **hapticity**



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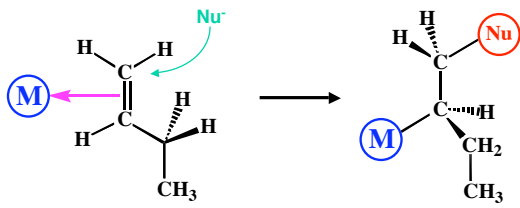
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### Nucleophilic Attack on Alkenes



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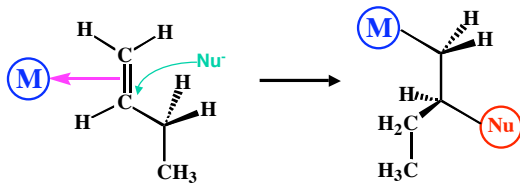
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### Nucleophilic Attack on Alkenes



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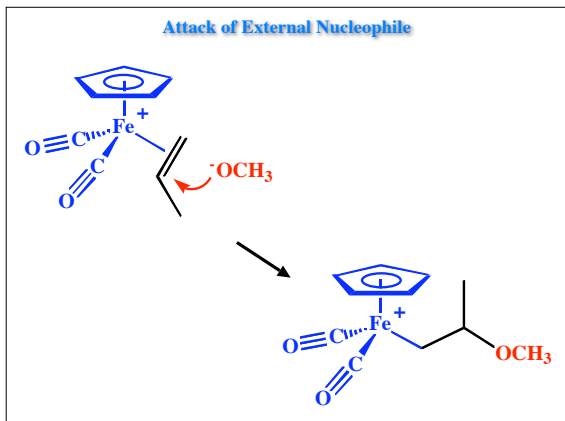
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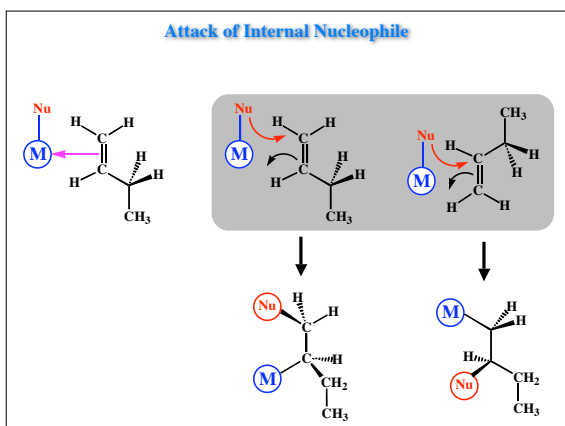
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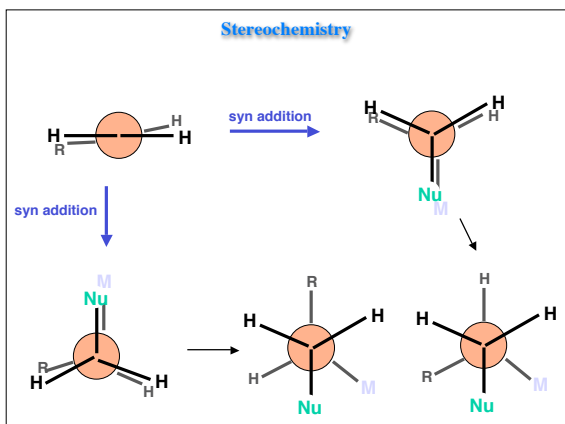
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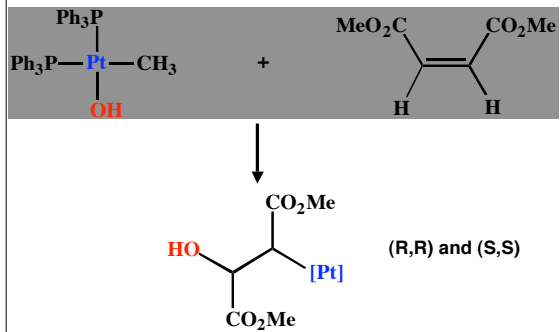
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### Syn Addition of Pt-OH

M. Bennett et al., J. Am. Chem. Soc. 1995, 117, 8335-40



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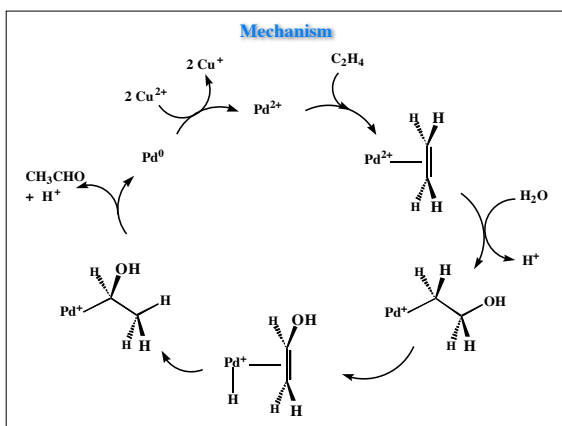
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### Mechanism



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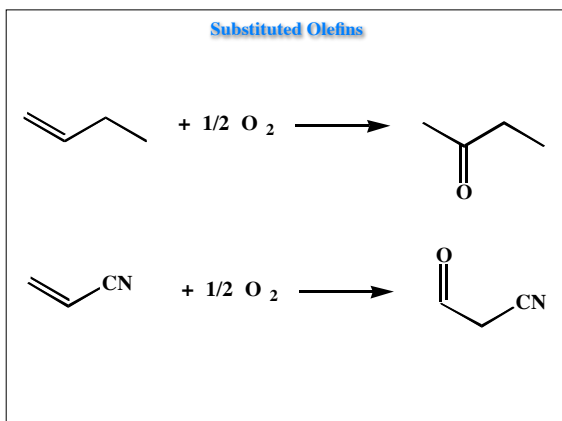
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### Substituted Olefins



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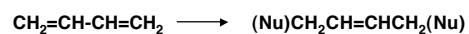
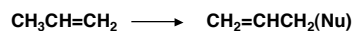
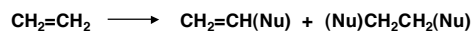
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### Addition of Other Nucleophiles



**Nucleophiles:**  $\text{HO}^-$ ,  $\text{RO}^-$ ,  $\text{CH}_3\text{CO}_2^-$ ,  $\text{NO}_3^-$ ,  $\text{Cl}^-$

**Oxidants:**  $\text{CuX}_2$ ,  $\text{HNO}_3$ , quinones,  $\text{K}_2\text{S}_2\text{O}_8$ ,  $\text{FeCl}_3$

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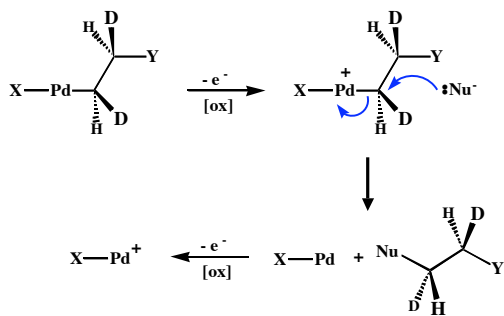
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### Nucleophilic Attack on Pd-Alkyl



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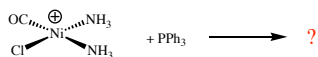
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### Draw the product:



Give the oxidation state, d electron count and total electron count of the metal.

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