

**M.Sc. Semester-IV**  
**Core Course-9 (CC-9)**  
**Synthetic Organic Chemistry**



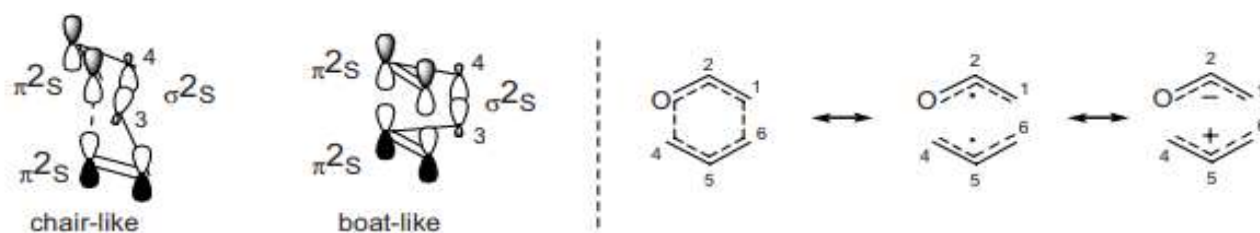
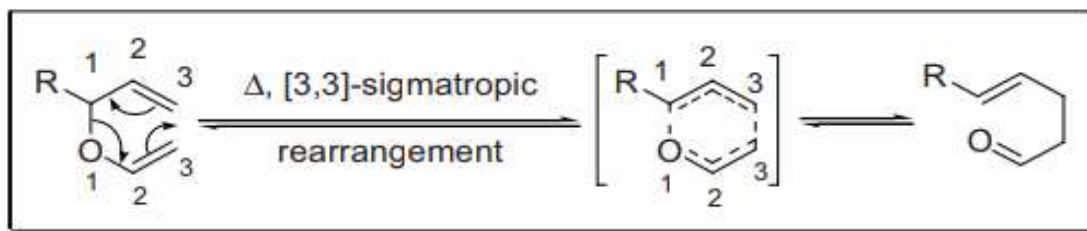
**II. Pericyclic Reactions**  
**3. Claisen Rearrangement**



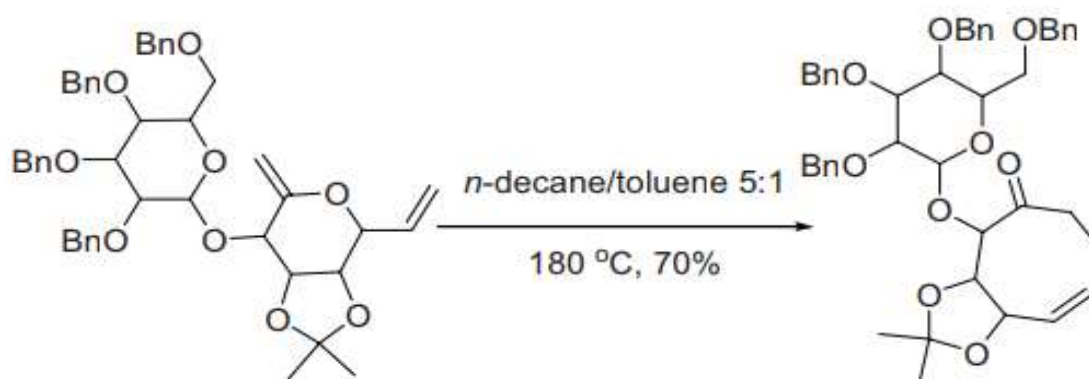
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## Claisen rearrangements

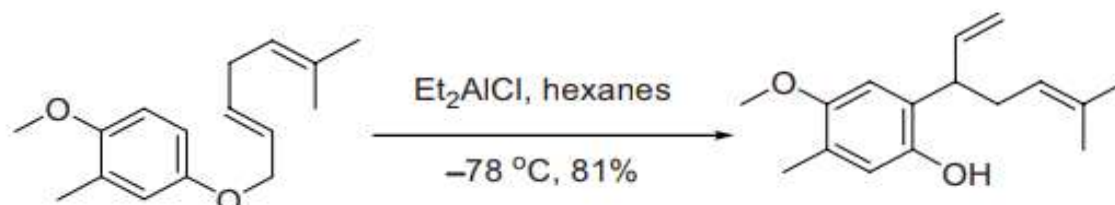
The Claisen, *para*-Claisen rearrangements, Belluš–Claisen rearrangement; Corey–Claisen, Eschenmoser–Claisen rearrangement, Ireland–Claisen, Kazmaier–Claisen, Saucy–Claisen; orthoester Johnson–Claisen, along with the Carroll rearrangement, belong to the category of *[3,3]-sigmatropic rearrangements*. The Claisen rearrangement is a concerted process and the arrow pushing here is merely illustrative.



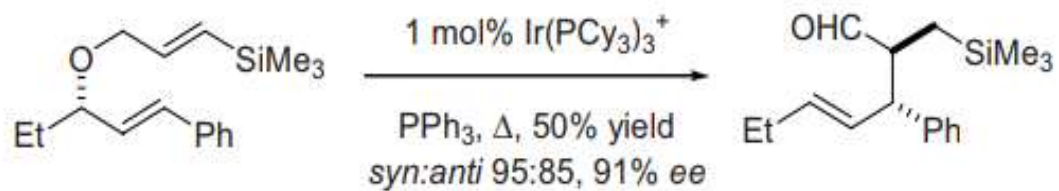
### Example 1<sup>7</sup>



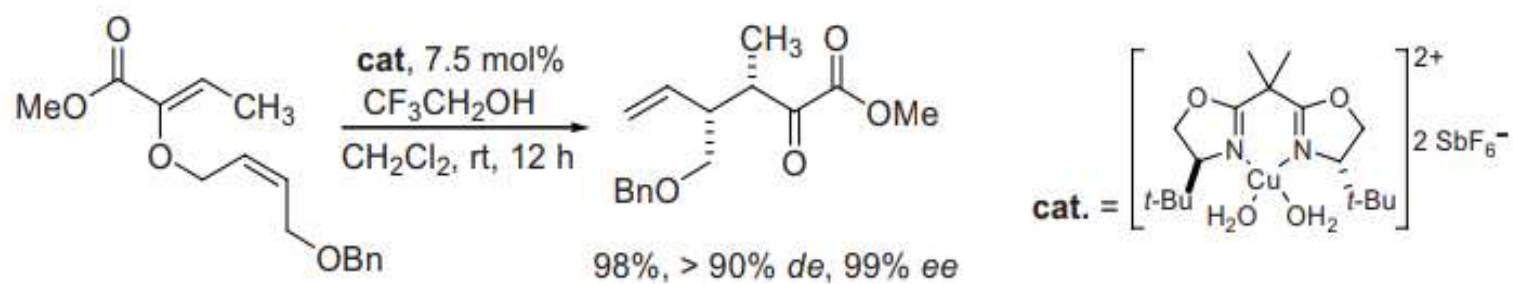
### Example 2<sup>8</sup>



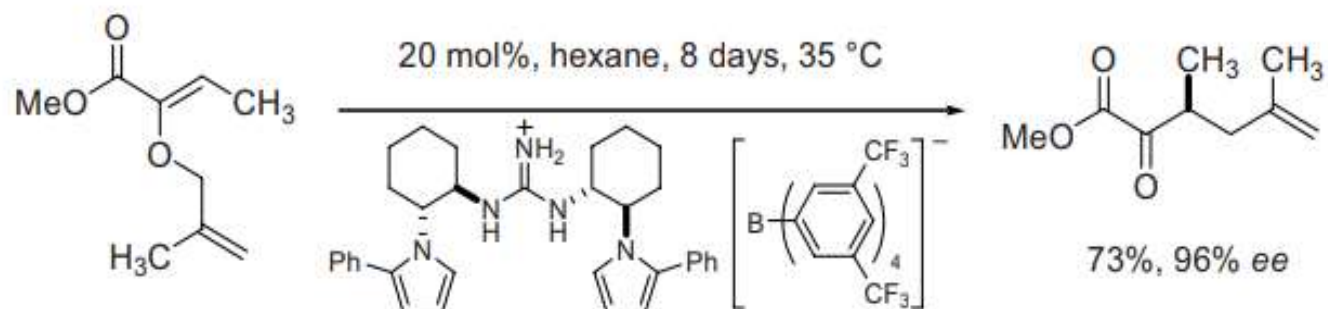
### Example 3<sup>9</sup>



### Example 4, Asymmetric Claisen rearrangement<sup>10</sup>



### Example 5, Asymmetric Claisen rearrangement<sup>11</sup>



## References

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