

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



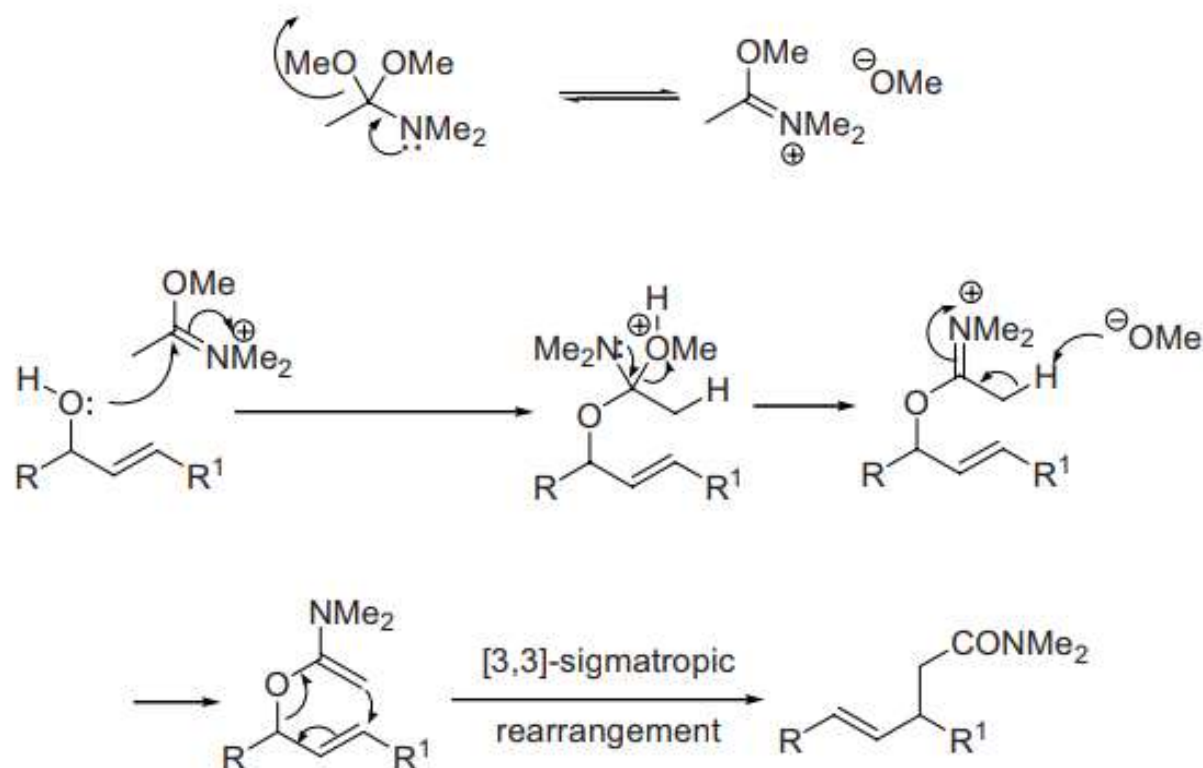
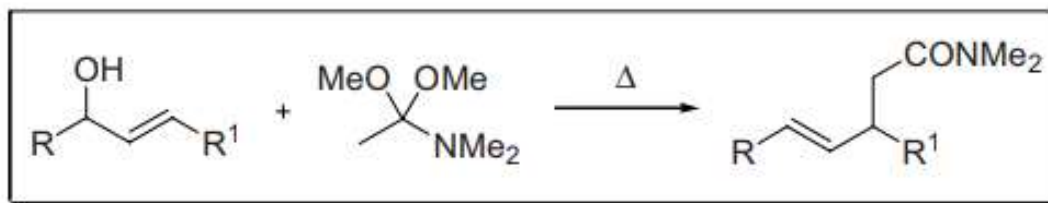
**II. Pericyclic Reactions**  
**8. Eschenmoser -Claisen Rearrangement**



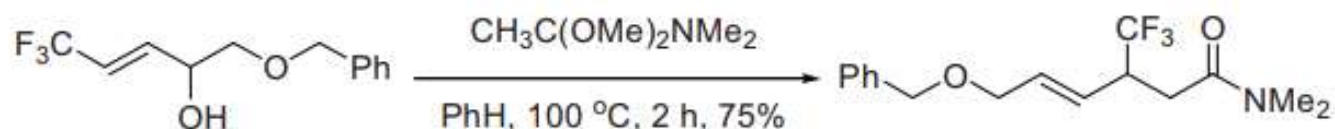
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## Eschenmoser–Claisen amide acetal rearrangement

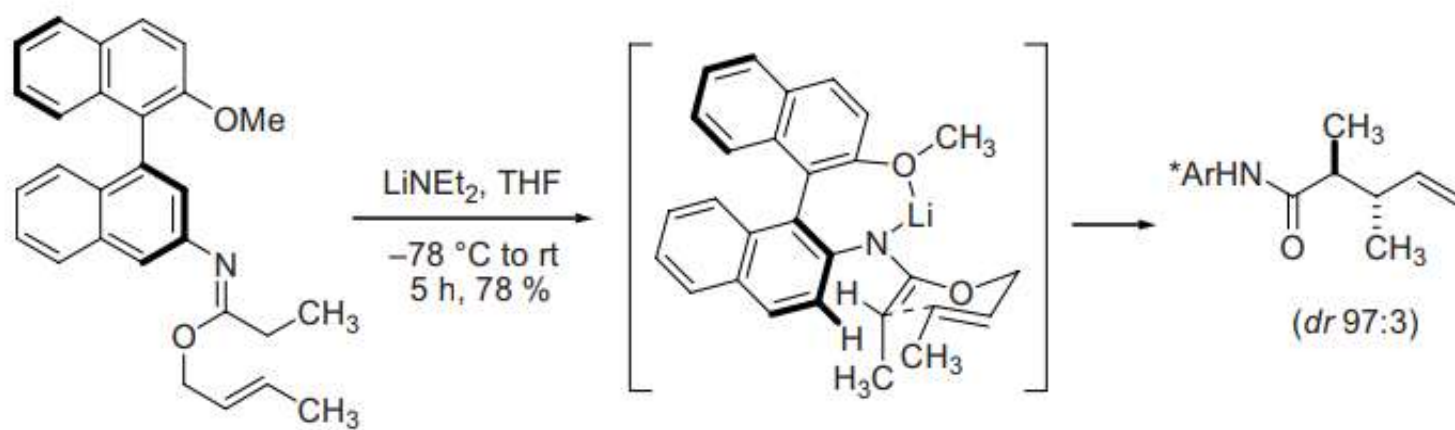
[3,3]-Sigmatropic rearrangement of *N,O*-ketene acetals to yield  $\gamma,\delta$ -unsaturated amides. Since Eschenmoser was inspired by Meerwein's observations on the interchange of amide, the Eschenmoser–Claisen rearrangement is sometimes known as the Meerwein–Eschenmoser–Claisen rearrangement.



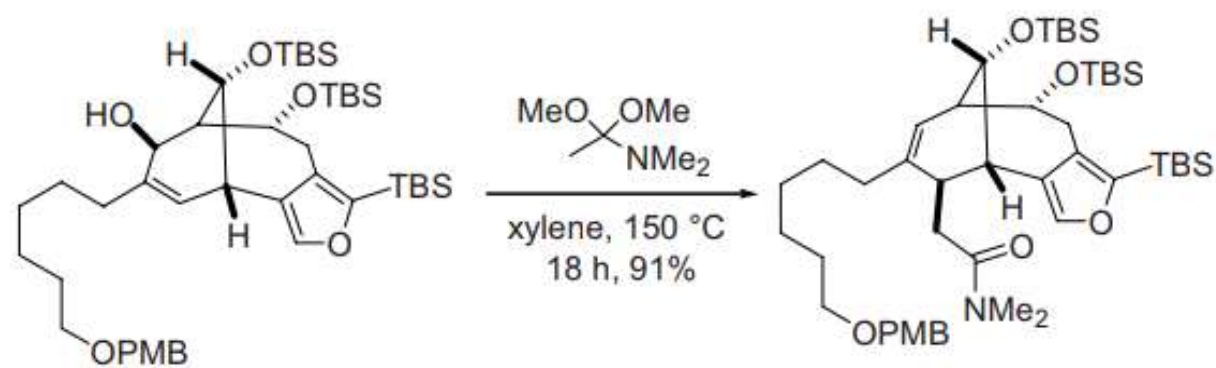
### Example 1<sup>4</sup>



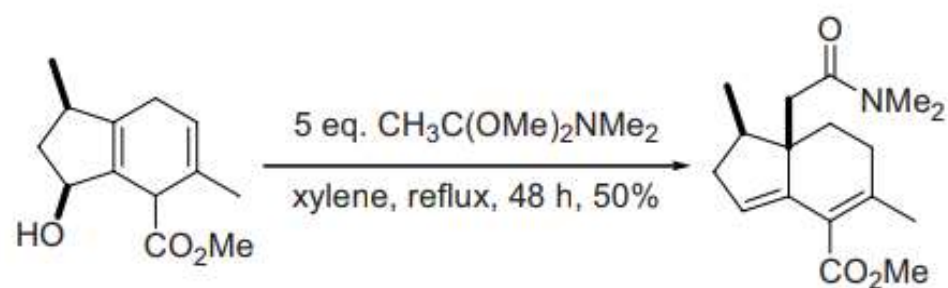
Example 2<sup>5</sup>



Example 3<sup>6</sup>



Example 4<sup>8</sup>



## References

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2. Wick, A. E.; Felix, D.; Steen, K.; Eschenmoser, A. *Helv. Chim. Acta* **1964**, *47*, 2425–2429. Albert Eschenmoser (Switzerland, 1925–) is known for his work on, among many others, the monumental total synthesis of Vitamin B<sub>12</sub> with R. B. Woodward in 1973. He now holds dual appointments at both ETH Zürich and the Scripps Research Institute in La Jolla, CA.
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