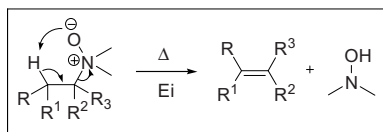
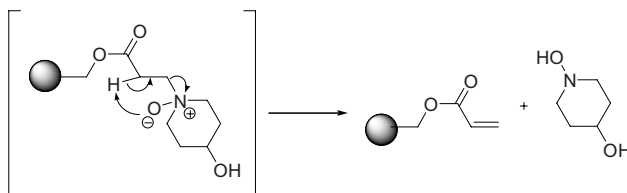
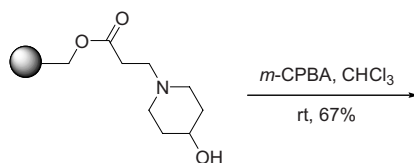


Cope elimination reaction

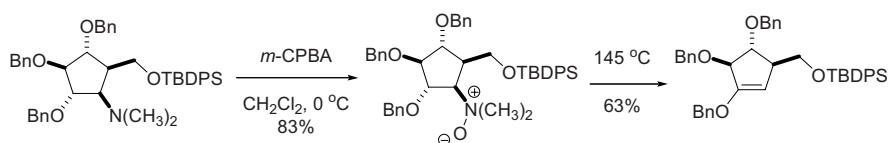
Thermal elimination of *N*-oxides to olefins and *N*-hydroxyl amines.



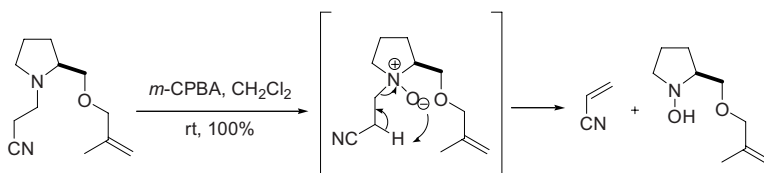
Example 1, Solid-phase Cope elimination⁵

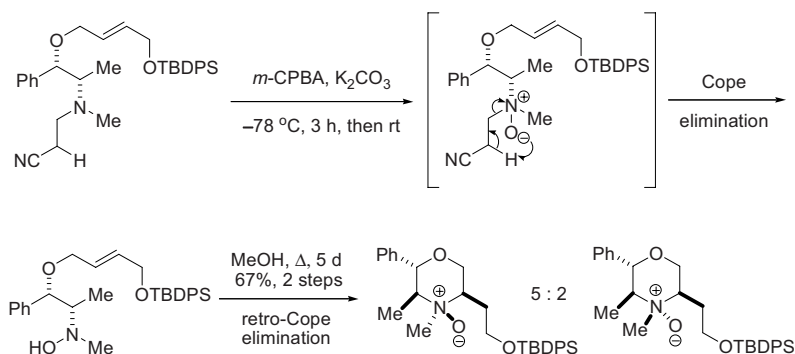


Example 2⁶



Example 3⁸



Example 4, Retro-Cope elimination⁹

References

1. Cope, A. C.; Foster, T. T.; Towle, P. H. *J. Am. Chem. Soc.* **1949**, *71*, 3929–3934. Arthur Clay Cope (1909–1966) was born in Dunreith, Indiana. He was a professor at MIT when he discovered the Cope elimination reaction and the Cope rearrangement. The Arthur Cope Award is a prestigious award in organic chemistry from the American Chemical Society.
2. Cope, A. C.; Trumbull, E. R. *Org. React.* **1960**, *11*, 317–493. (Review).
3. DePuy, C. H.; King, R. W. *Chem. Rev.* **1960**, *60*, 431–457. (Review).
4. Gallagher, B. M.; Pearson, W. H. *Chemtracts: Org. Chem.* **1996**, *9*, 126–130. (Review).
5. Sammelson, R. E.; Kurth, M. J. *Tetrahedron Lett.* **2001**, *42*, 3419–3422.
6. Vasella, A.; Remen, L. *Helv. Chim. Acta.* **2002**, *85*, 1118–1127.
7. Garcia Martinez, A.; Teso Vilar, E.; Garcia Fraile, A.; de la Moya Cerero, S.; Lora Maroto, B. *Tetrahedron: Asymmetry* **2002**, *13*, 17–19.
8. O’Neil, I. A.; Ramos, V. E.; Ellis, G. L.; Cleator, E.; Chorlton, A. P.; Tapolczay, D. J.; Kalindjian, S. B. *Tetrahedron Lett.* **2004**, *45*, 3659–3661.
9. Henry, N.; O’Meil, I. A. *Tetrahedron Lett.* **2007**, *48*, 1691–1694.
10. Fuchter, M. J. *Cope elimination reaction*. In *Name Reactions for Functional Group Transformations*; Li, J. J., Corey, E. J., Eds.; John Wiley & Sons: Hoboken, NJ, **2007**, pp 342–353. (Review).
11. Bourgeois, J.; Dion, I.; Cebrowski, P. H.; Loiseau, F.; Bedard, A.-C.; Beauchemin, A. M. *J. Am. Chem. Soc.* **2009**, *131*, 874–875.