

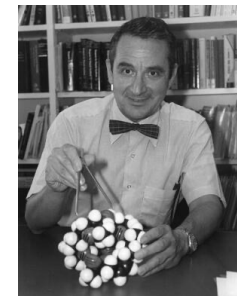
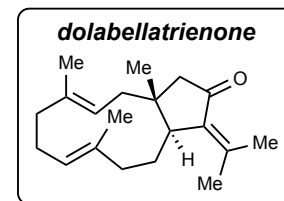


Dr. Robert Kania

- Dolabellane class of marine diterpenoids contains numerous structures that have been targets of total synthesis
- Characterized by *trans*-bicyclo[9.3.0]tetradecane core
- 3 approaches to these scaffolds before 1996
- Dolabellatrienone's absolute configuration assigned by analogy
- Corey published other dolabellane syntheses after this approach:

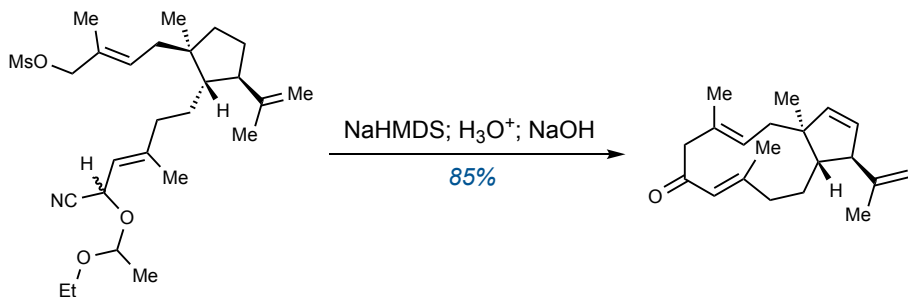
*J. Am. Chem. Soc.* **2005**, *127*, 13813, <https://doi.org/10.1021/ja055137+>

See also: SOTW, 10/12/2018, Dr. Yaroslav Boyko, [Araneosene](#)

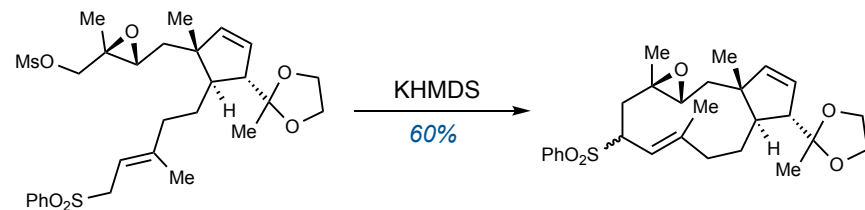


E. J. Corey

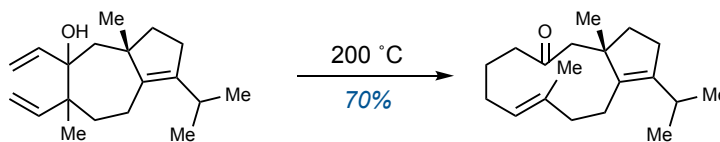
## Forming the 11-membered ring:



*J. Am. Chem. Soc.* **1993**, *115*, 24, 11654, <https://doi.org/10.1021/ja00077a097>

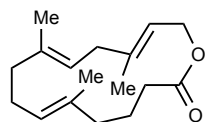


*Tet. Lett.*, **1998**, *39*, 6503, [https://doi.org/10.1016/S0040-4039\(98\)01385-9](https://doi.org/10.1016/S0040-4039(98)01385-9)

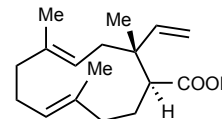


*Tet. Lett.*, **1994**, *35*, 2761 [https://doi.org/10.1016/S0040-4039\(00\)77026-2](https://doi.org/10.1016/S0040-4039(00)77026-2)

Diastereo- and enantioselective Claisen enables simple substrate construction



**Enantioselective Claisen**



Achiral starting material allows for enantiodivergent syntheses

*J. Am. Chem. Soc.* **1996**, *118*, 1229, <https://doi.org/10.1021/ja9536779>

