

9.4: Problems and Reference

Problems

How does the product formation differ from cyclic alkenes compared to that of acyclic alkenes?

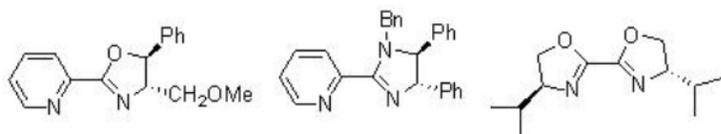
Write a mechanism for the Rh-catalyzed hydroformylation of alkenes.

What is the major difference between the Rh-catalyzed hydroformylation and the Pd-catalyzed hydroxy- and alkoxy-carbonylation reactions?

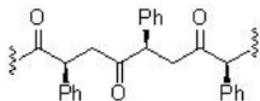
What is the role of benzoquinone in the palladium-catalyzed bis-alkoxy-carbonylation of alkenes?

Complete the following reactions.

Propose synthetic routes for the preparation of the following chiral ligands.



How will you prepare the following syndiotactic copolymer.



Reference

I. Ojima, *Catalytic Asymmetric Synthesis*, 3rd ed., Wiley, New Jersey, 2010.

This page titled [9.4: Problems and Reference](#) is shared under a [CC BY-SA](#) license and was authored, remixed, and/or curated by [Tharmalingam Punniyamurthy](#) (National Programme on Technology Enhanced Learning (NPTEL)).