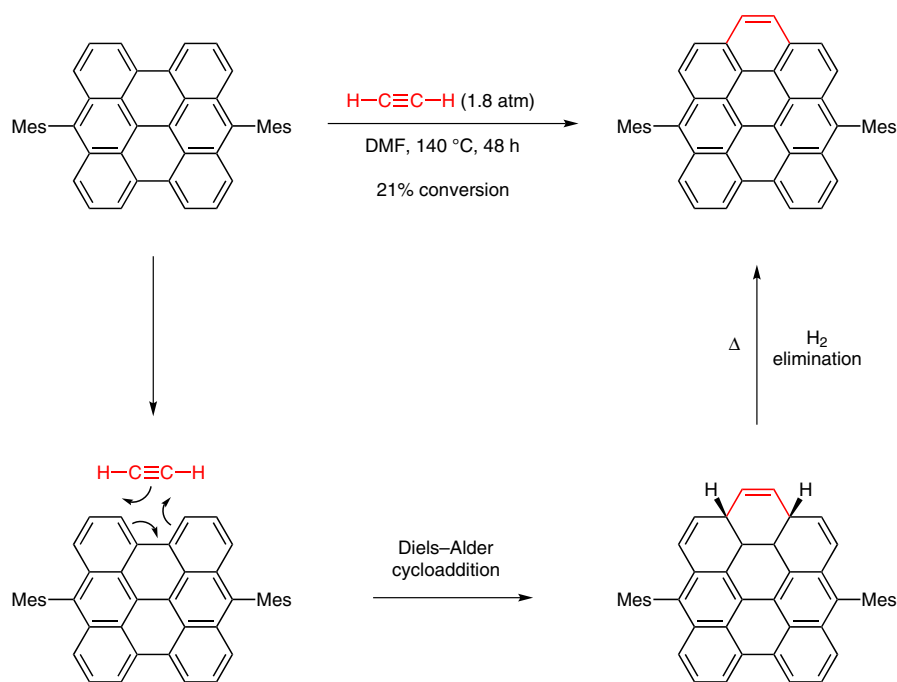


Use of Acetylene Gas as Dienophile in a Diels–Alder Reaction



Significance: The use of acetylene gas as the dienophile in a cycloaddition Diels–Alder reaction to the bay region of a polyaromatic hydrocarbon is reported for the first time.

Comment: The sequence of cycloaddition followed by hydrogen elimination–rearomatization utilizing acetylene might prove to be a useful tool in the preparation of larger polyaromatic hydrocarbons, such as uniform carbon nanotubes, from small hydrocarbon templates.