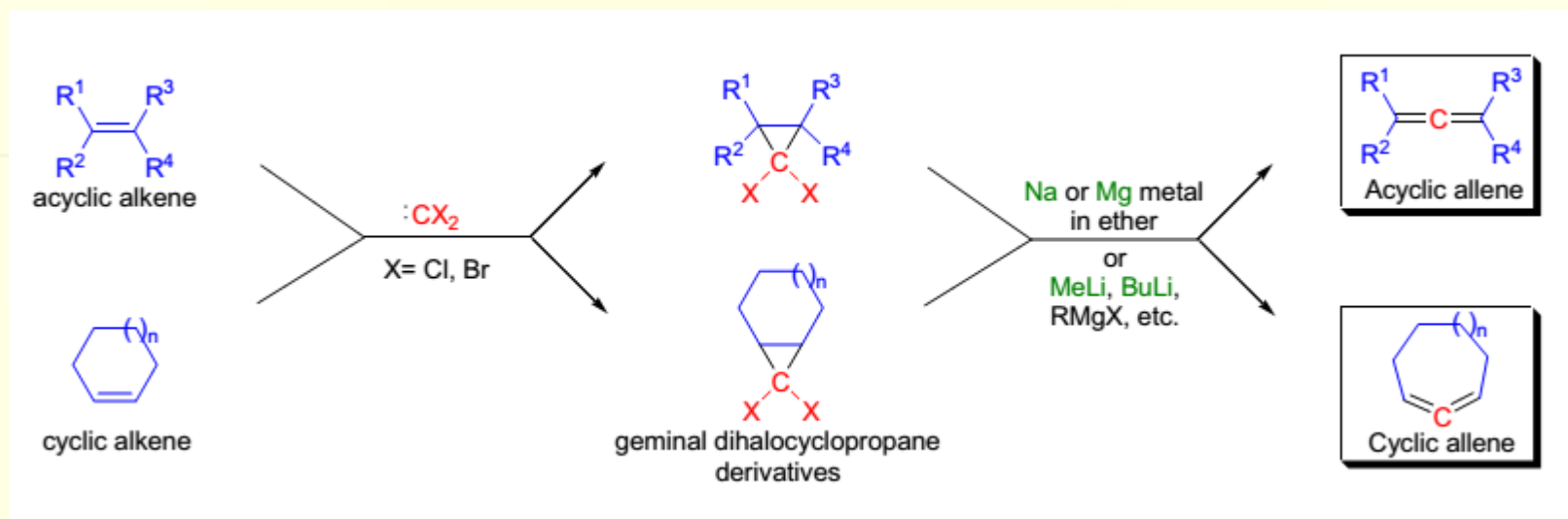
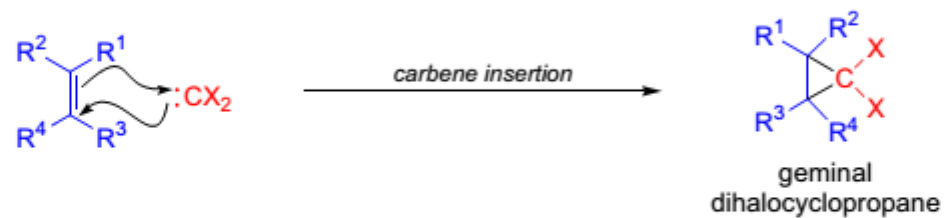


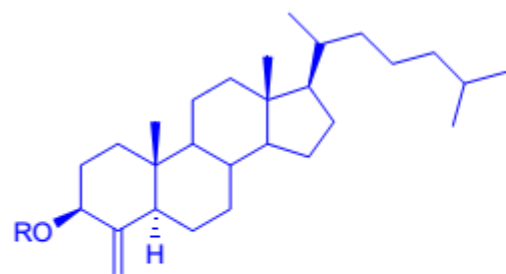
# Doering-LaFlamme allene synthesis





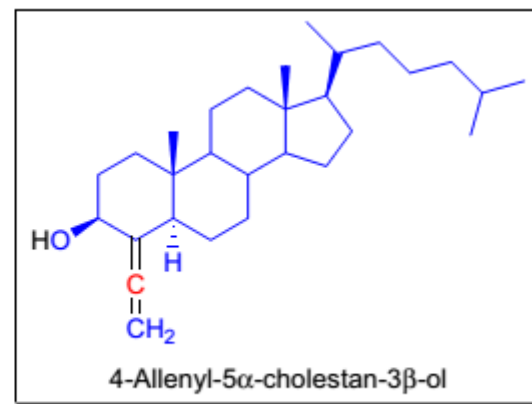
Metal-halogen exchange and rearrangement:





R= tetrahydropyranyl

1.  $\text{CHBr}_3$  /  $\text{KO}t\text{-Bu}$   
hexanes, overnight,  
25 °C; 14%
2.  $\text{MeLi}$  (1.1 equiv), 0 °C  
then stir overnight at 25 °C
3. 10%  $\text{HCl}$  in  $\text{THF}$ , 80 °C  
45 min;  
quantitative for 2 steps



1.  $\text{CHBr}_3$ ,  $\text{KOH}$  (powder),  
 $\text{TEBACl}$ ,  $\text{CH}_2\text{Cl}_2$ ,  
0 to 25 °C, 5h; 80%
2.  $\text{MeLi}$  /  $\text{Et}_2\text{O}$ , 0 °C, 1.5h  
84%

