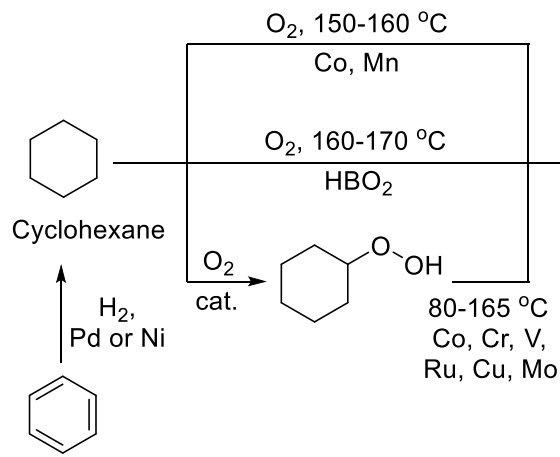
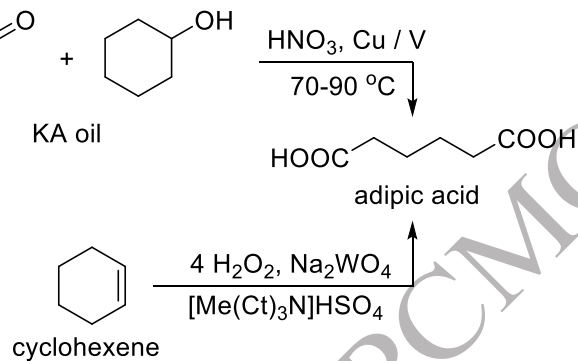


Conventional synthesis versus Noyori synthesis of adipic acid:



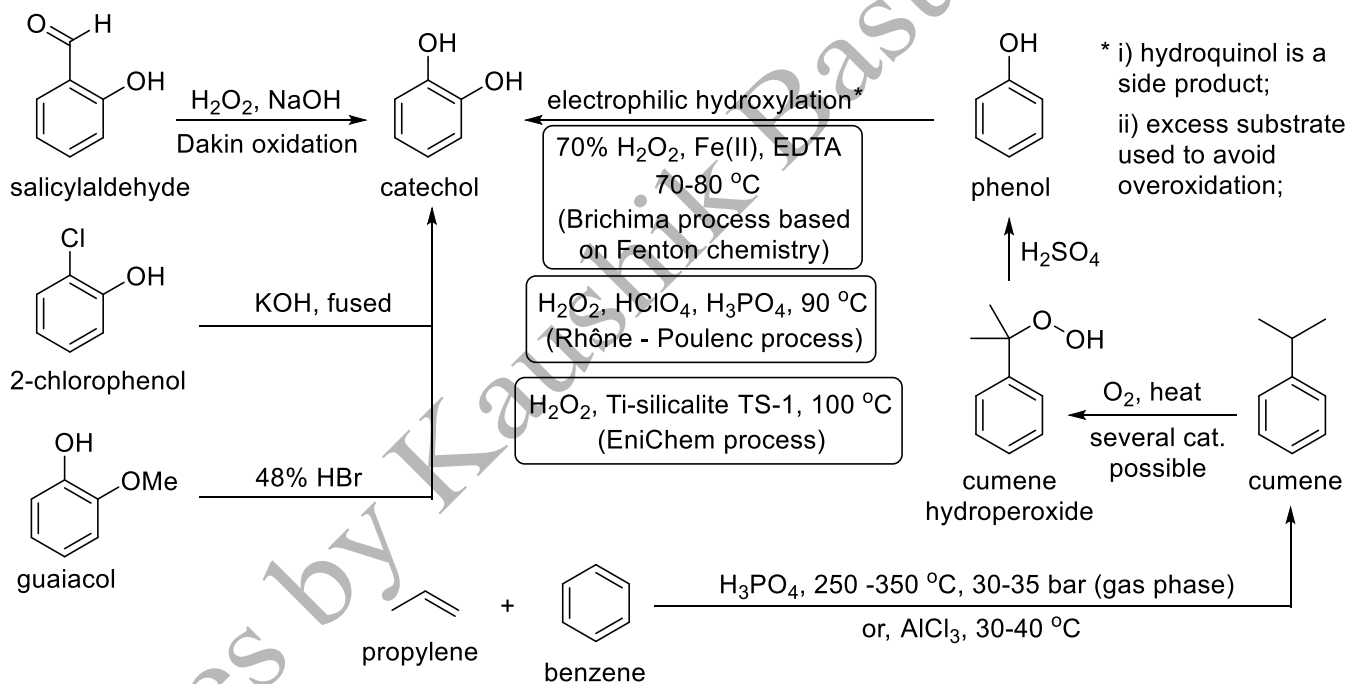
benzene - non-renewable feedstock; carcinogenic

High c (50–60 wt%) and large consumption of HNO_3 - highly corrosive and produces significant quantities of nitrous oxide, N_2O and NO_x .
 N_2O emission - global warming and ozone depletion.

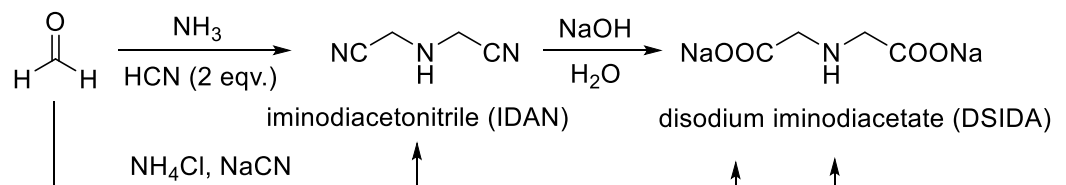


Aqueous, organic biphasic reaction; high yield; entirely free of organic solvents and halides. H_2O_2 is a clean oxidant, water sole byproduct.

Conventional synthesis of catechol:



Conventional synthesis of imonodiacetic acid (IDA): Strecker method



Greener alternative:

