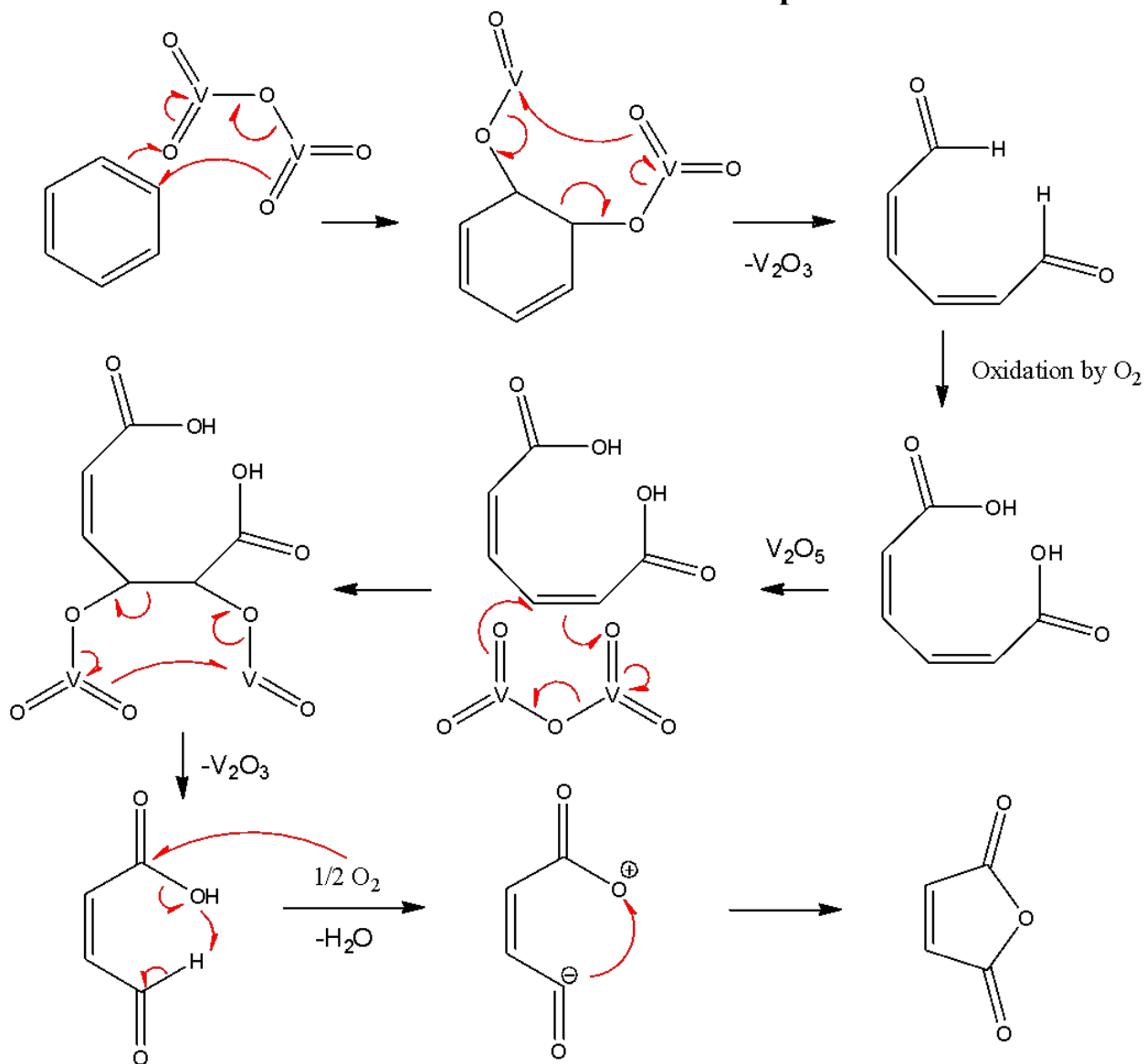
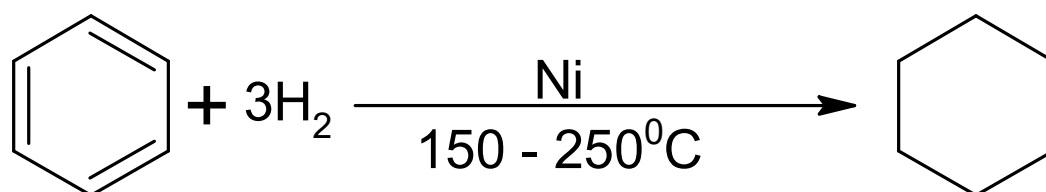


Mechanism of Oxidation of Benzene with Vanadium pentoxide

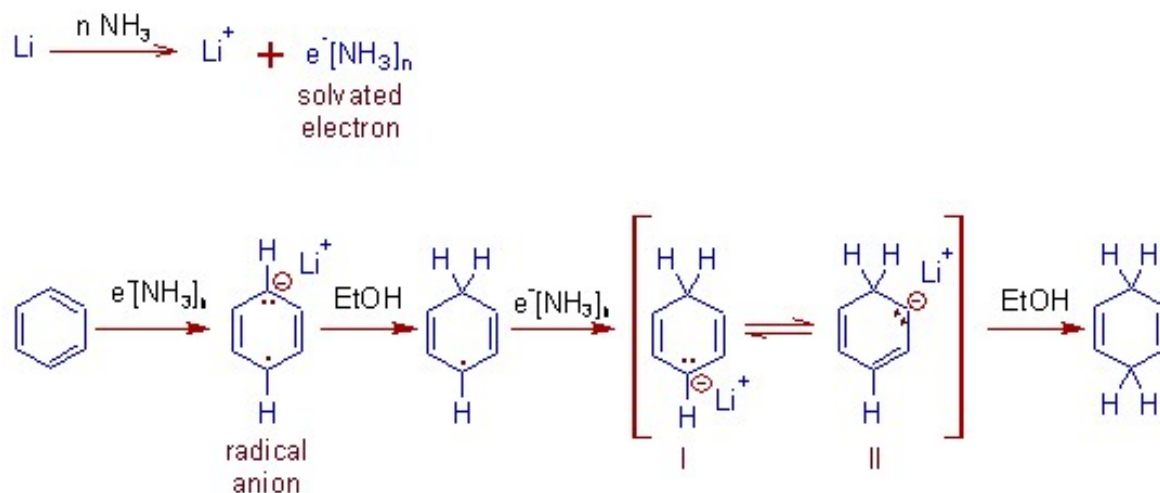


Catalytic Hydrogenation of Benzene in presence of Nickel



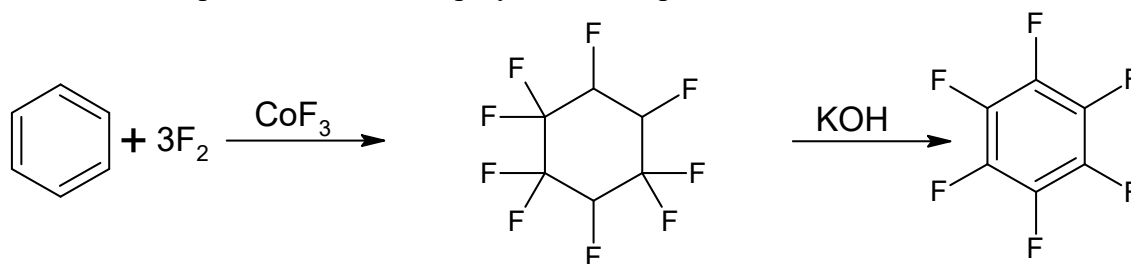
Birch Reduction of Benzene

In the Birch reduction, benzene, in the presence of sodium metal in liquid ammonia and methyl alcohol, produces a nonconjugated diene system. This reaction provides a convenient method for making a wide variety of useful cyclic dienes.

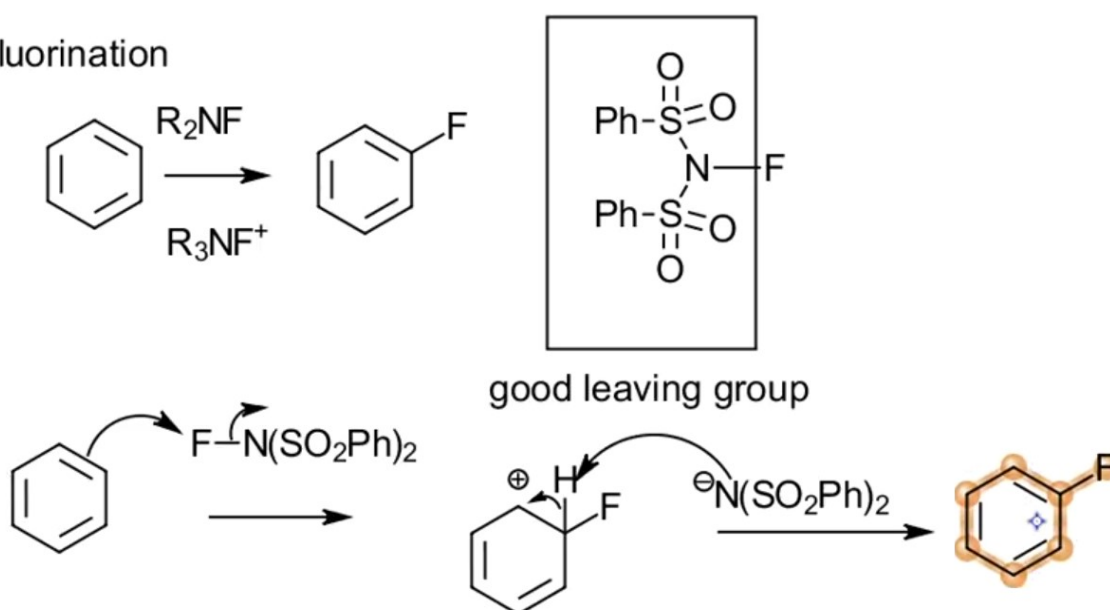


Fluorination of Benzene

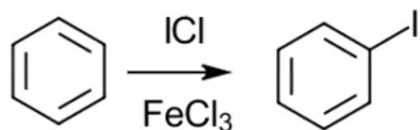
Direct Fluorination of Benzene is difficult because of High electronegativity and reactivity of Fluorine which produces undesired polysubstituted products.



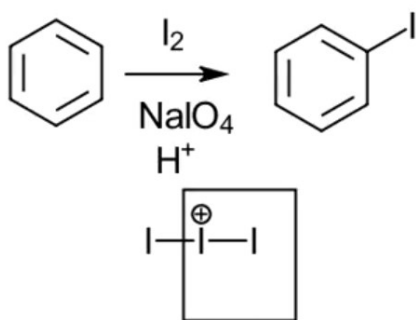
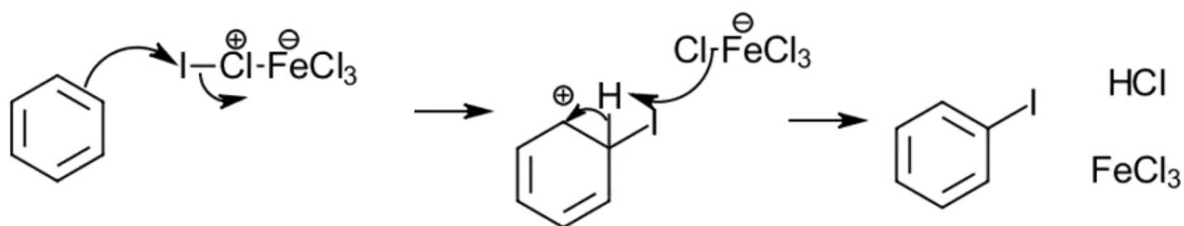
Fluorination



Iodination of Benzene



I-Cl
iodine monochloride



Several Other Reducing agents can be used to produce I⁺ ions from Molecular iodine to make the reaction.