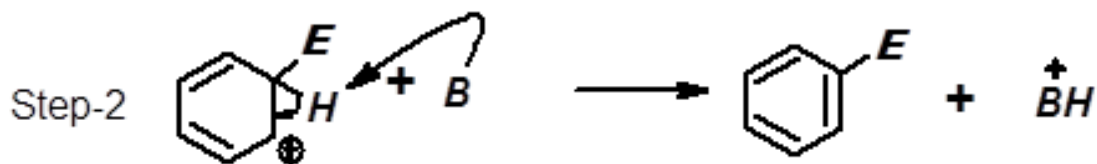
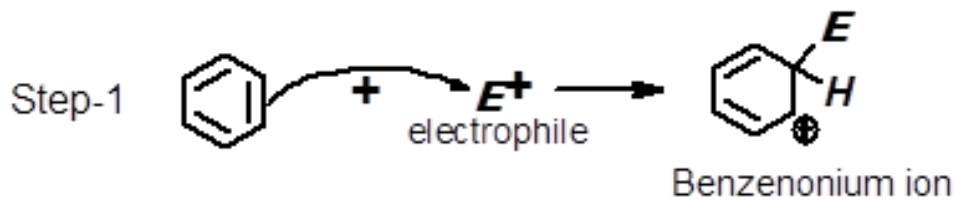
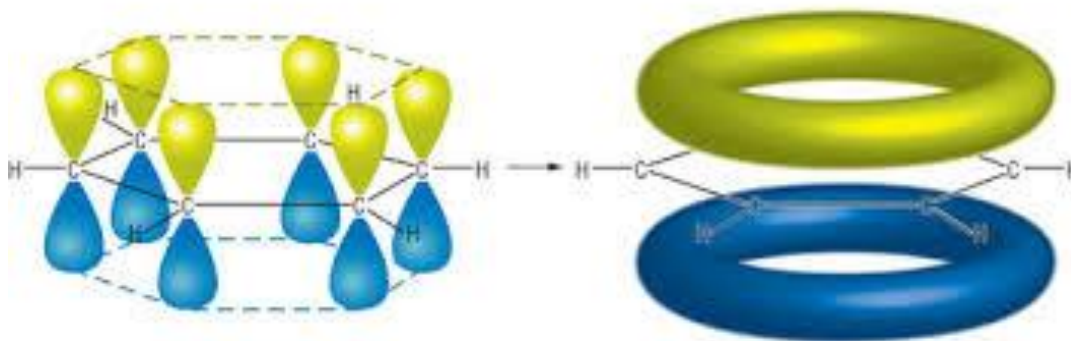


# AROMATIC ELECTROPHILIC SUBSTITUTION REACTIONS



1. Nitration

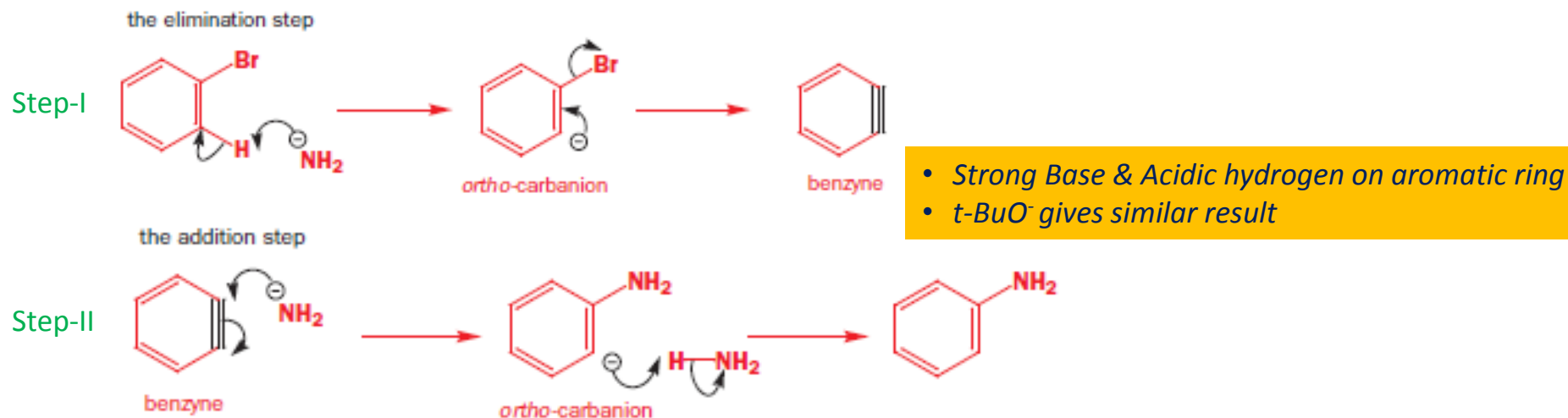
2. Halogenation

3. Sulphonation

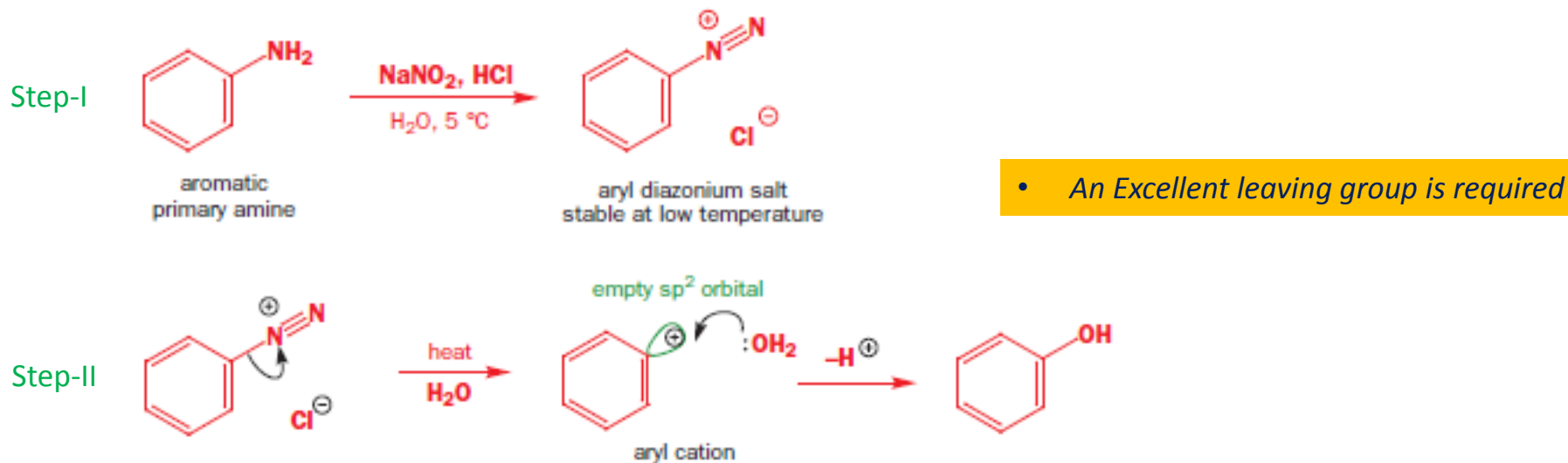
4. Friedal-Craft Alkylation and Acylation

# AROMATIC NUCLEOPHILIC SUBSTITUTION REACTIONS

## 1. The Benzyne Mechanism : Elimination–Addition Mechanism

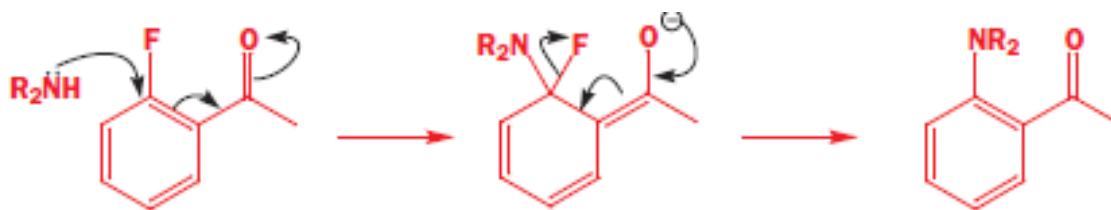


## 2. The S<sub>N</sub>1 Mechanism for Aromatic Nucleophilic Substitution Reactions

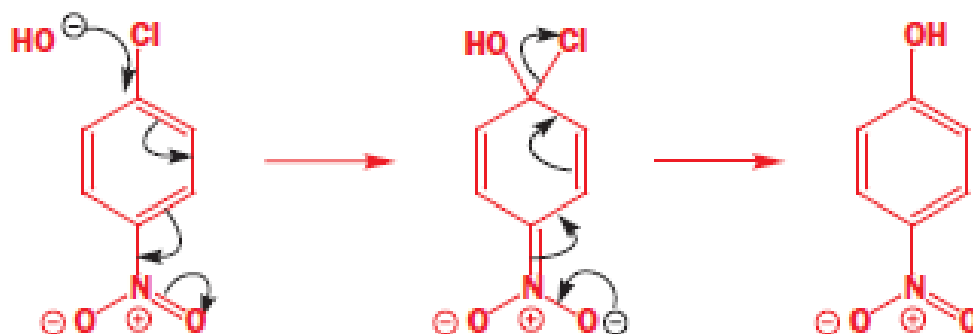


### 3. The Addition–Elimination Mechanism: Conjugate Substitution

Example-I



Example-II



- *Electrons must be able to get out of the ring facilitated by a strong electron-withdrawing group*