

## Chem 345 – Organic Reactions

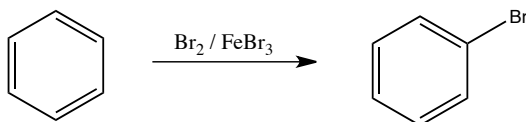
### Chapter 16

Prepared by José Laboy, MS

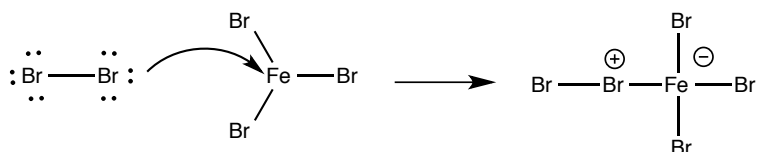
<http://www.chem.wisc.edu/areas/clc> (Resource page)

### Electrophilic Aromatic Substitution #2: Bromination

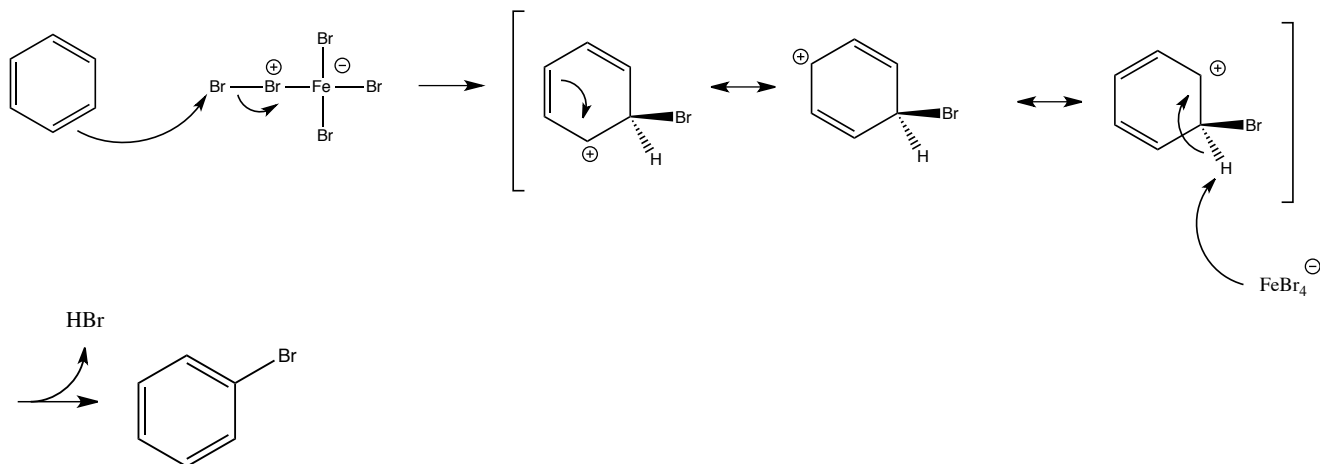
#### Reaction



#### Electrophile



#### Mechanism



This reaction occurs with ease. Organo-magnesium derivatives (Grignard reagents) of bromo-substituted arenes are readily prepared and very useful in synthesis. The reaction can be followed by the disappearance of the reddish  $\text{Br}_2$ .

The bromonium ion is not as reactive as the nitronium ion but is more selective. In reactions with activated mono-substituted arenes the major product is the *para*-bromo substitution.