

# Reaction Mechanism

(CHEM-563)

## Online Lecture-1

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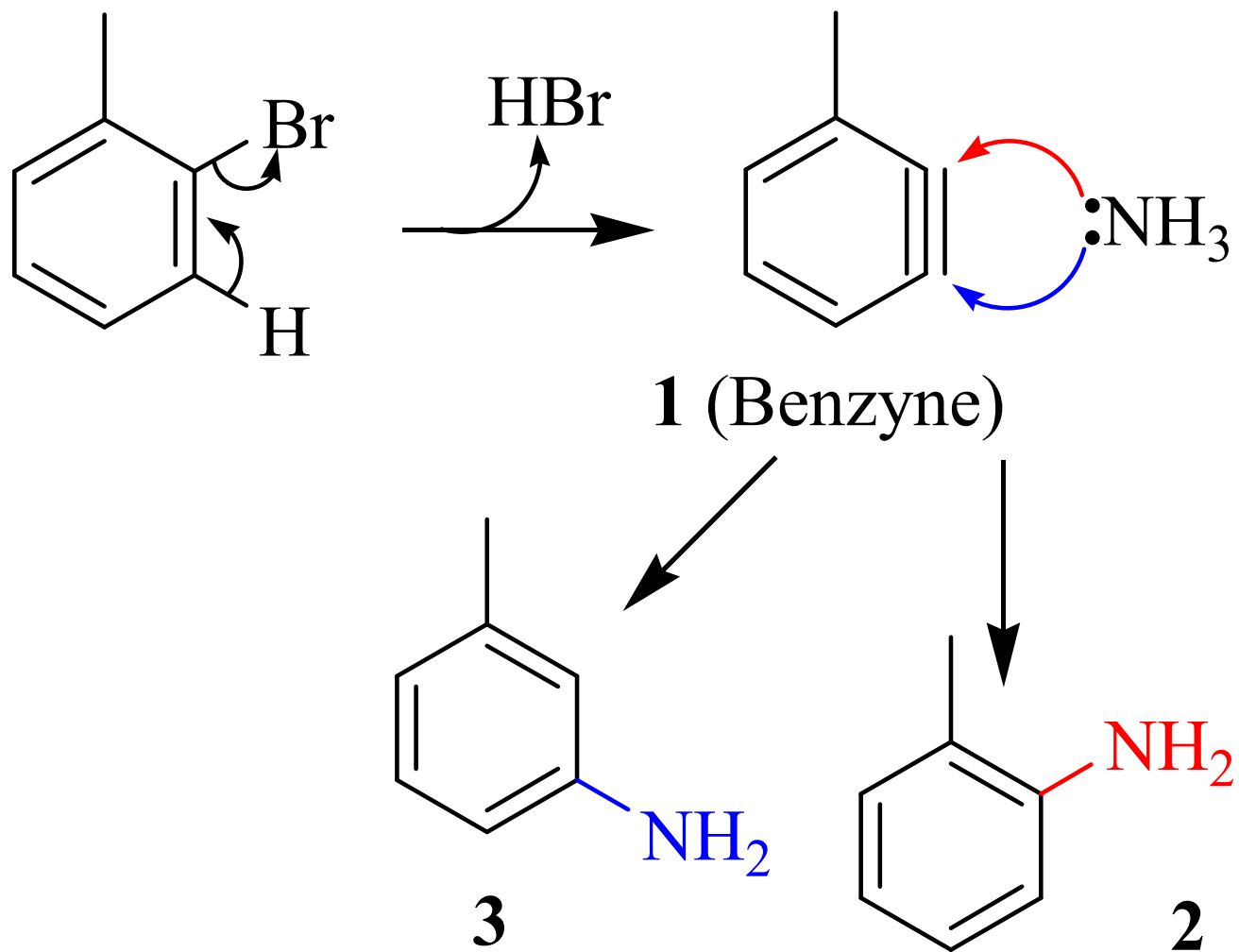
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University of Sargodha, Sargodha

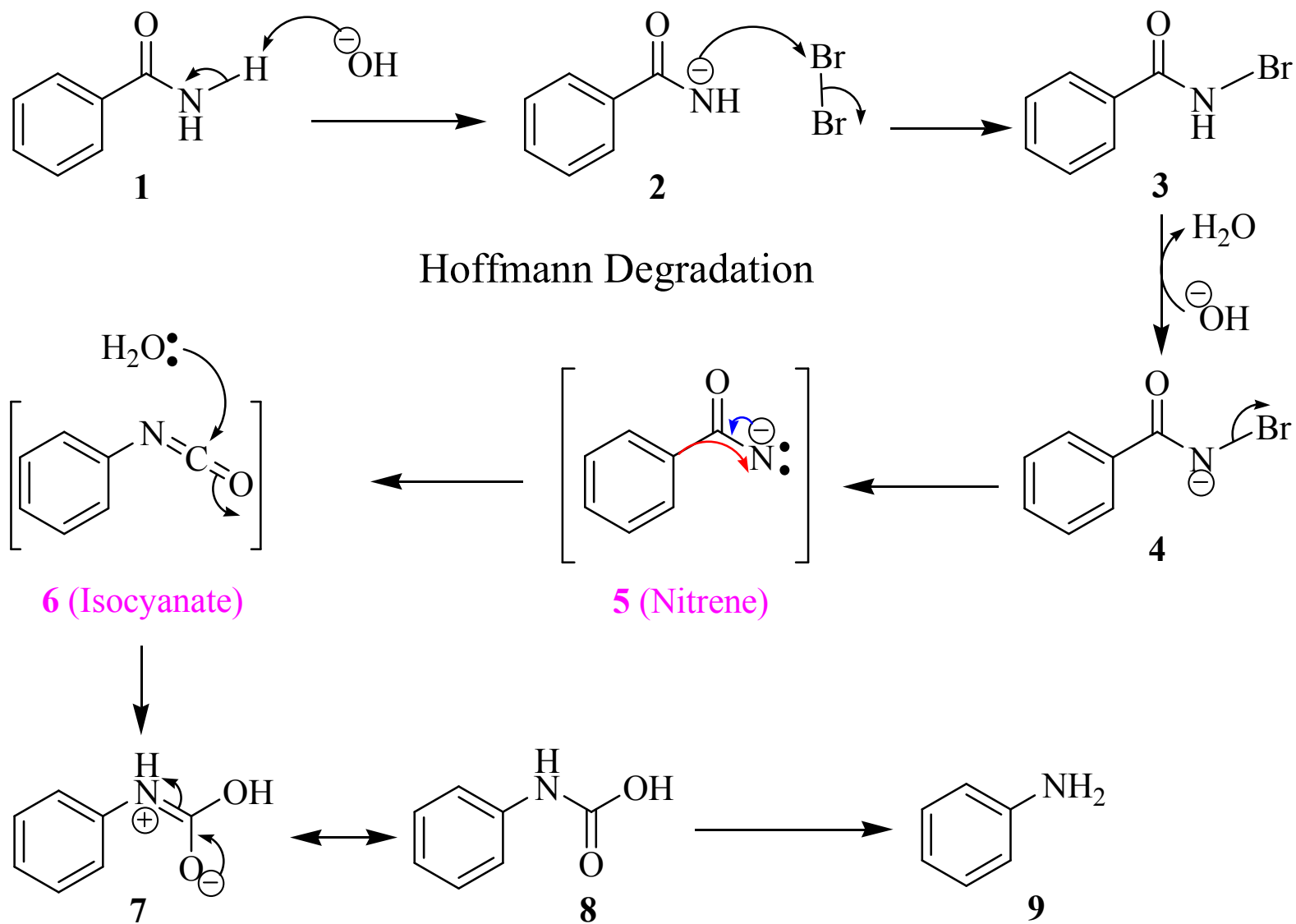
# Reaction Mechanism Elucidation

1. Kinetic Studies (Graphical & Half Life Protocol)
2. Kinetic Studies (Effect of  $\uparrow$  or  $\downarrow$  in  $d_x/d_t$  upon  $\uparrow$  or  $\downarrow$  in [A] and [B])
3. Identification of Products
4. Isolation of Intermediates
5. Isotopic Labeling

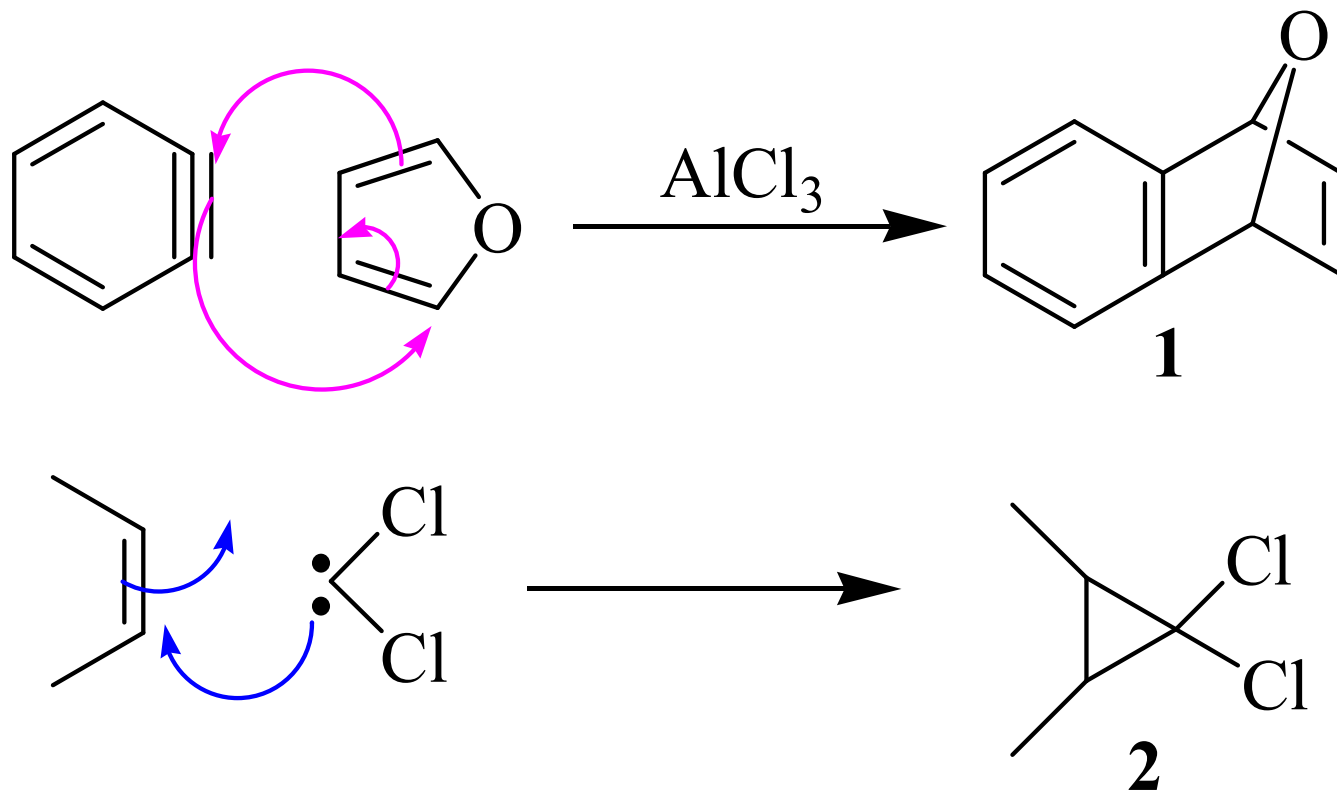
# Isolation of Intermediates (Example-1)



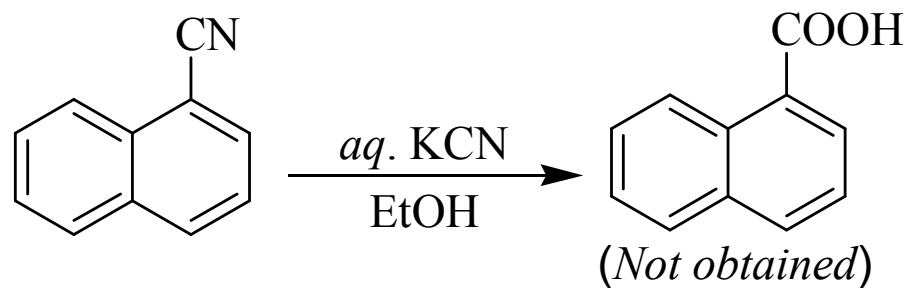
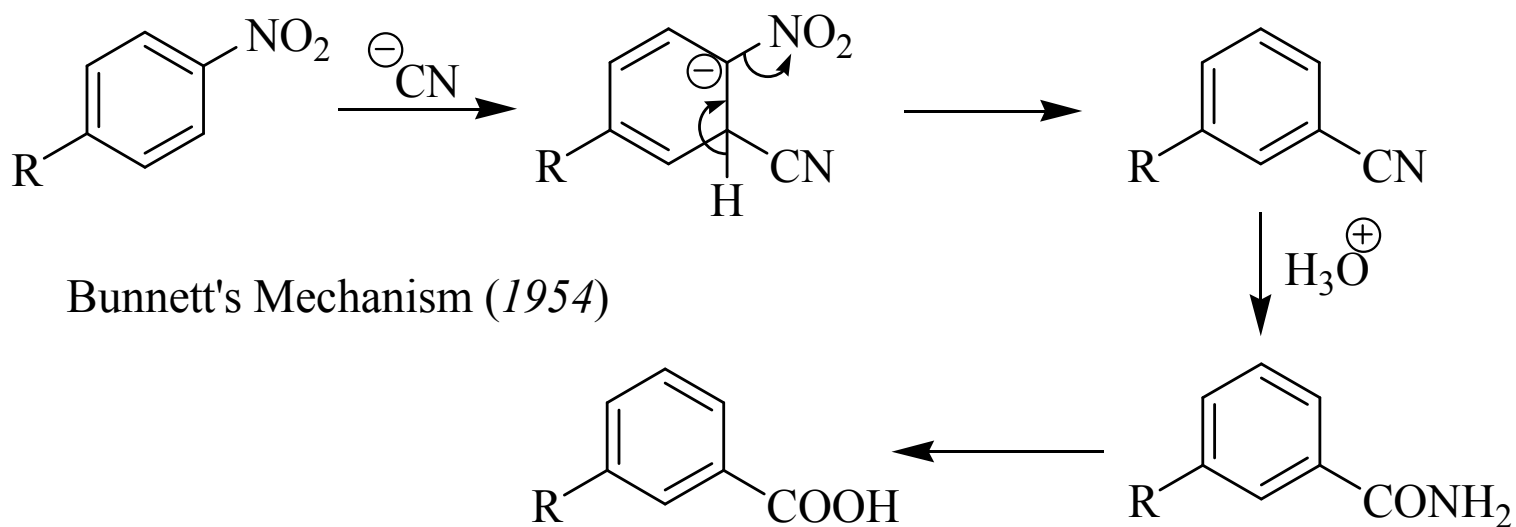
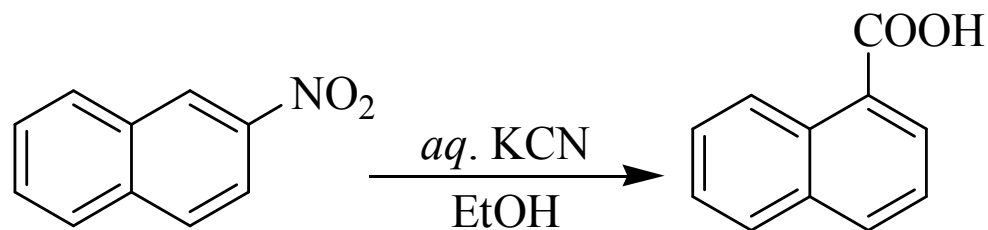
# Isolation of Intermediates (Example-2)

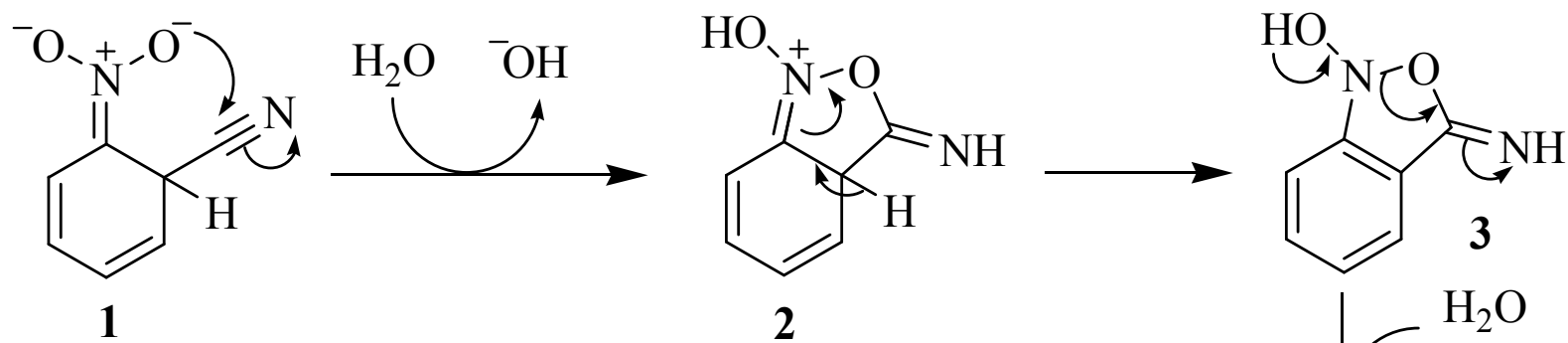


# Trapping of Intermediates (Example-1)

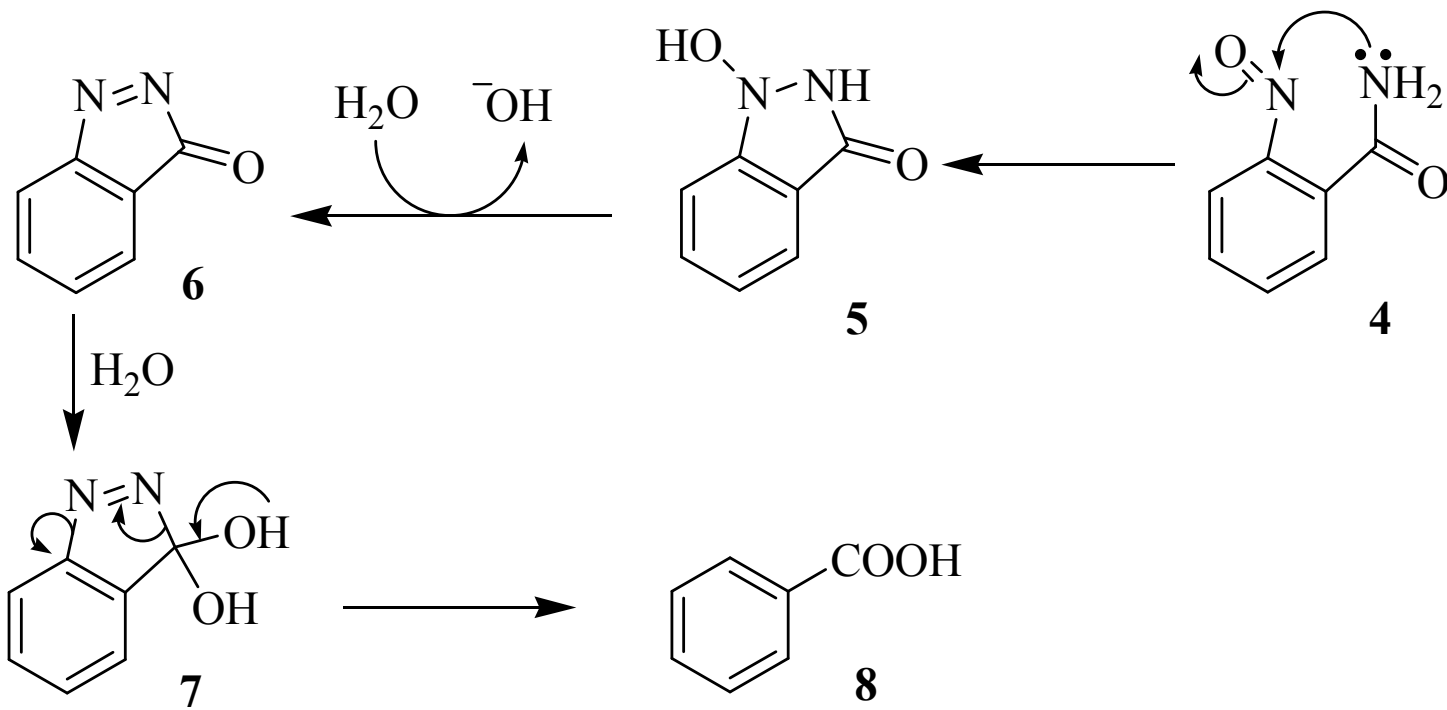


# Isolation of Intermediates (Example-3)

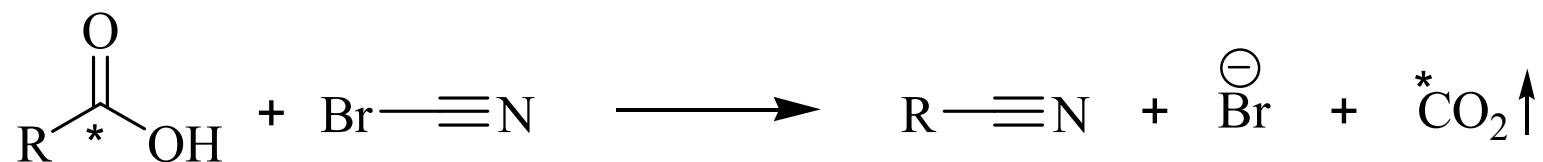
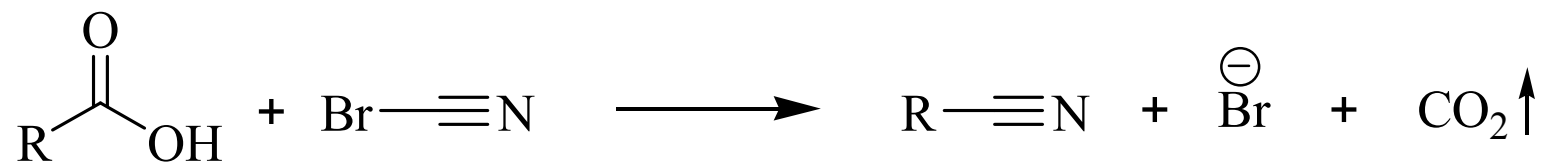




Rosenblum's Mechanism



# Isotopic Labeling



(not isolated)

