

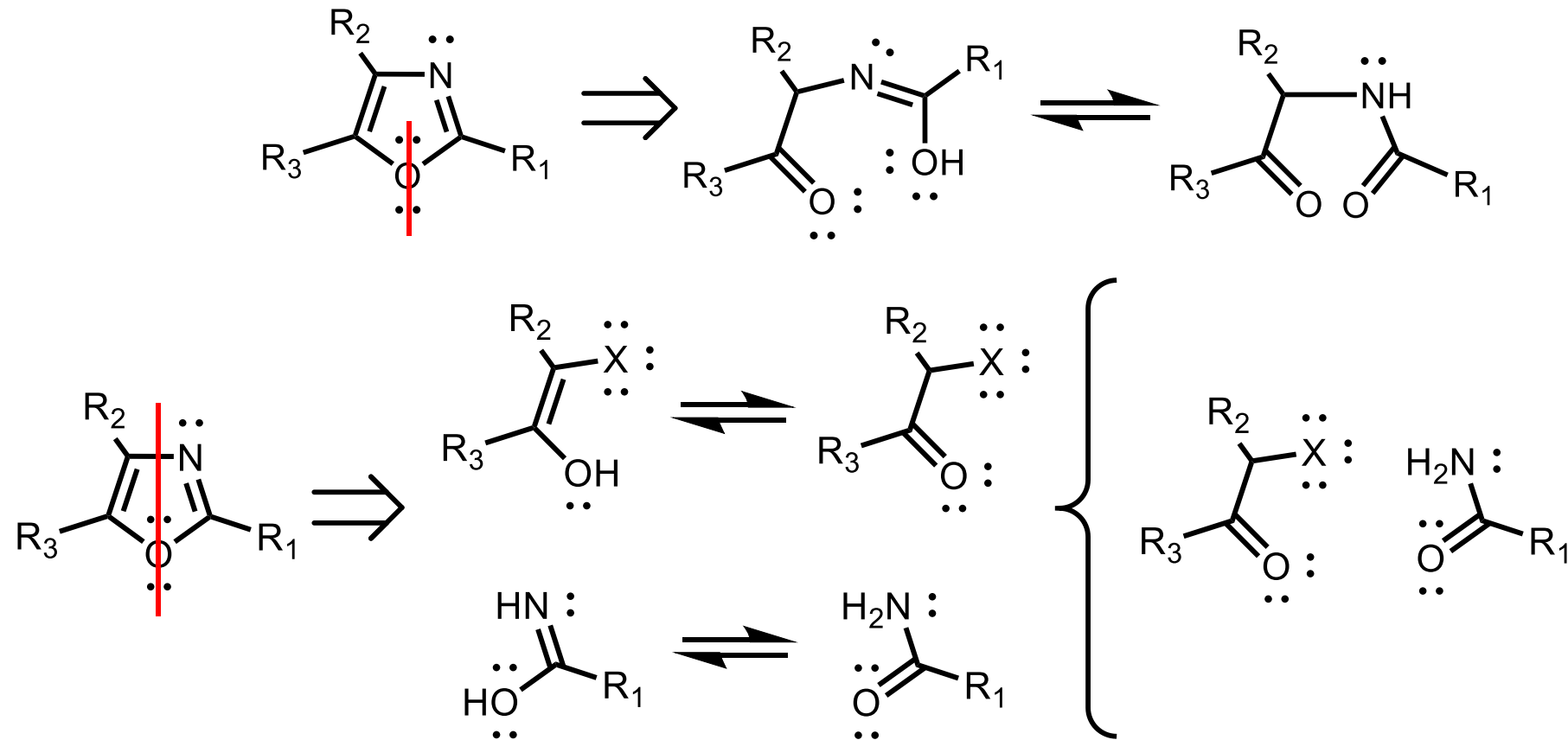
# Azoles 1,3

Síntesis y reacciones

# Oxazoles

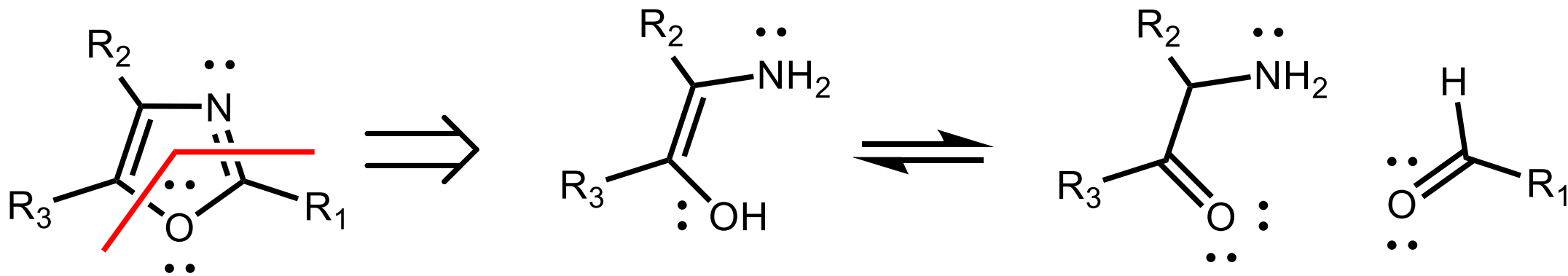
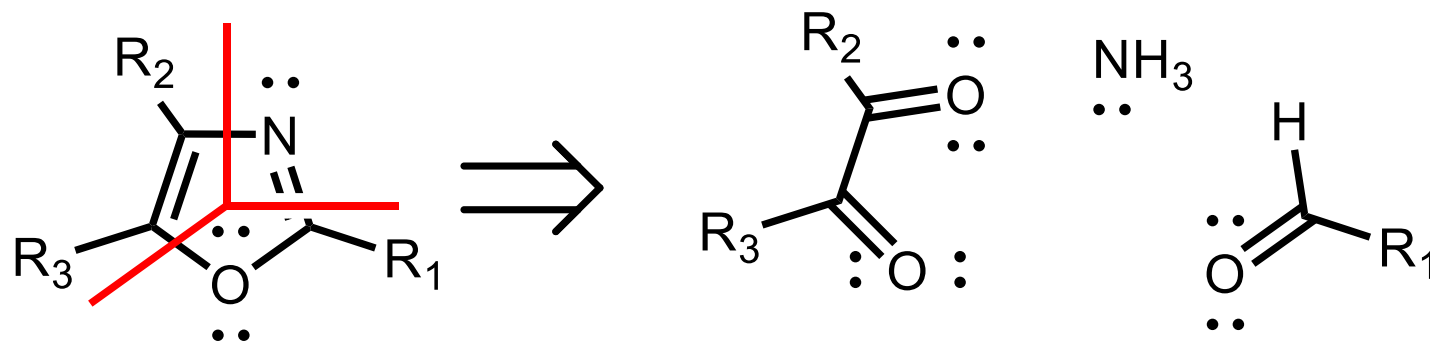
## Precursores-retrosíntesis

Síntesis de  
Robinson-Gabriel



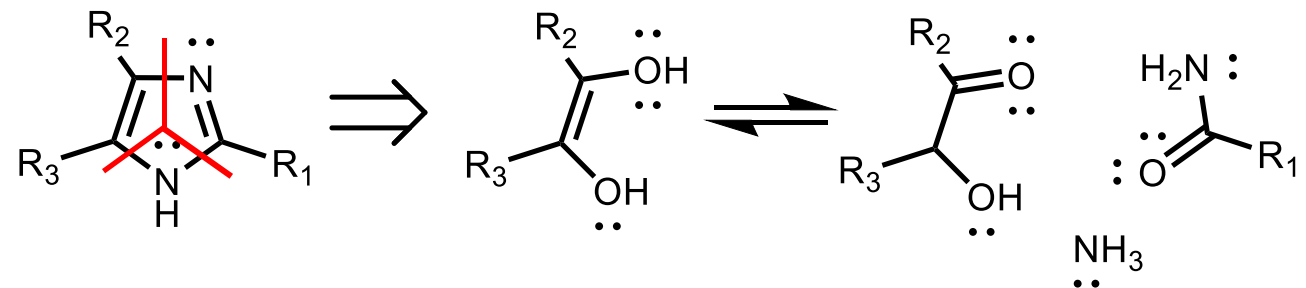
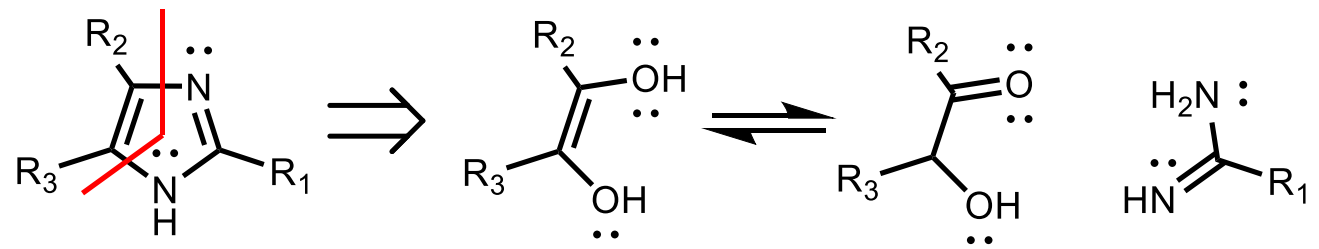
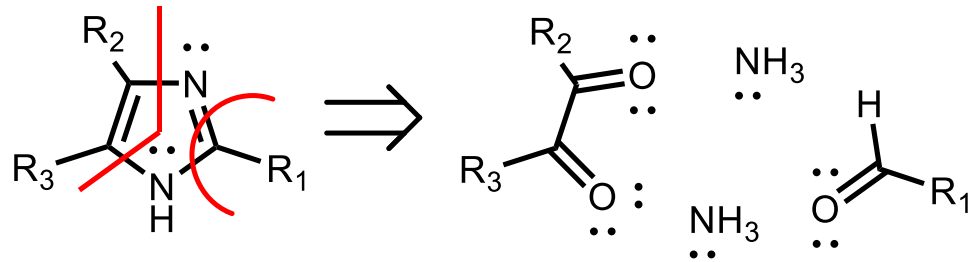
# Oxazoles

## Precursores-retrosíntesis



# Imidazoles

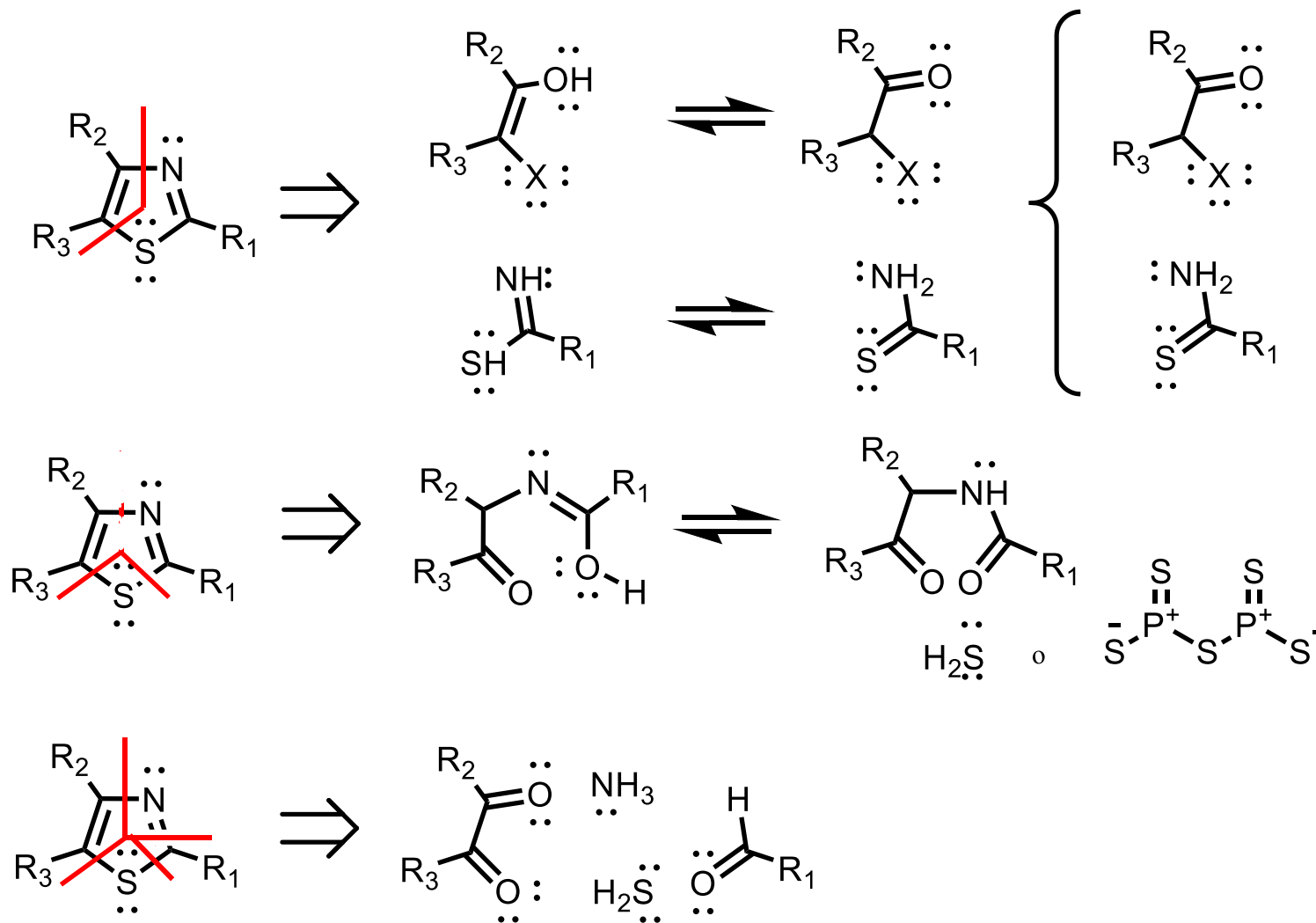
## Precursores-retrosíntesis



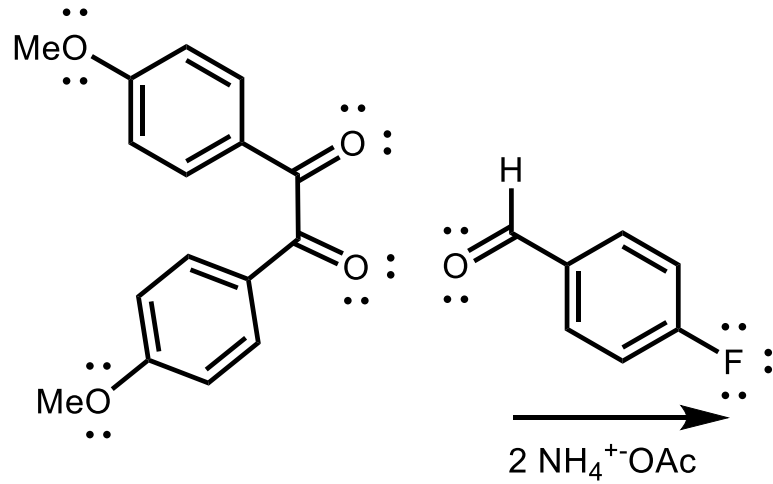
# Tiazoles

## Precursores-retrosíntesis

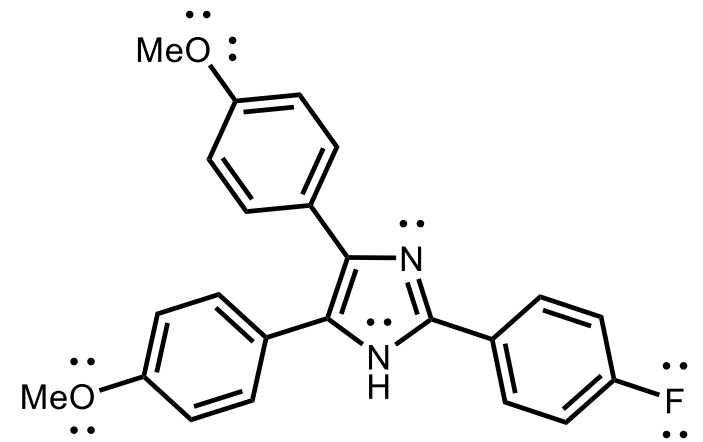
Síntesis  
de Hantzsch



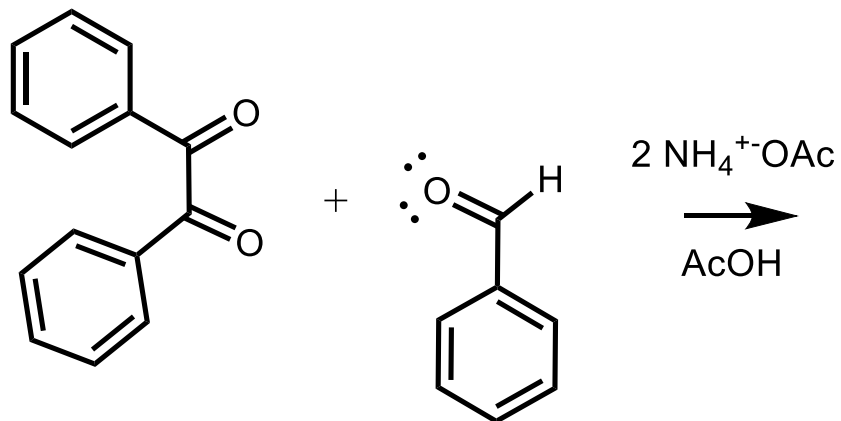
# Síntesis de imidazoles



1,2-bis(4-Metoxifenil)-  
1,2-etanodiona

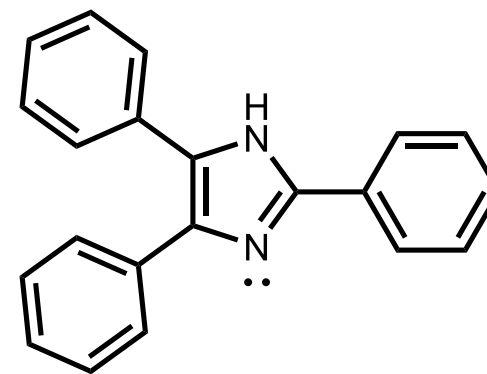


2-(4-Fluorofenil)-4,5-  
bis(4-metoxifenil)-1*H*-imidazol



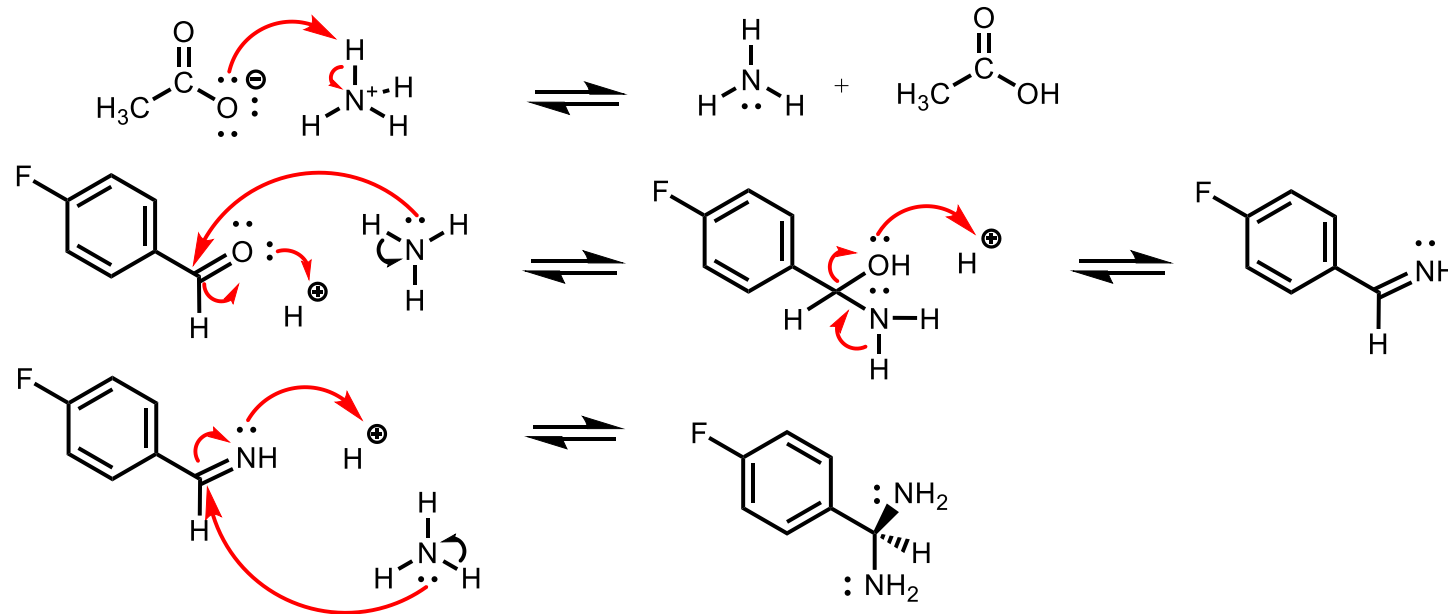
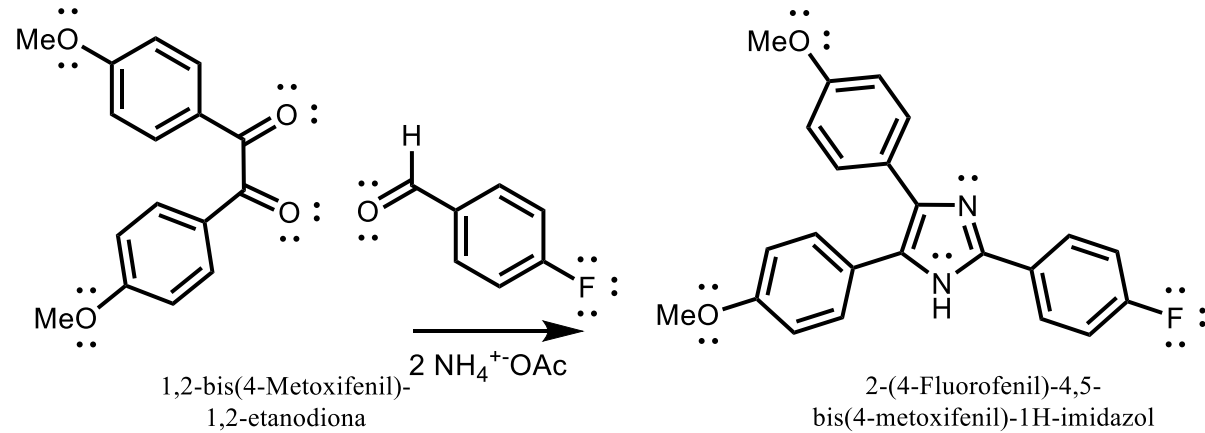
Bencilo

Benzaldehído

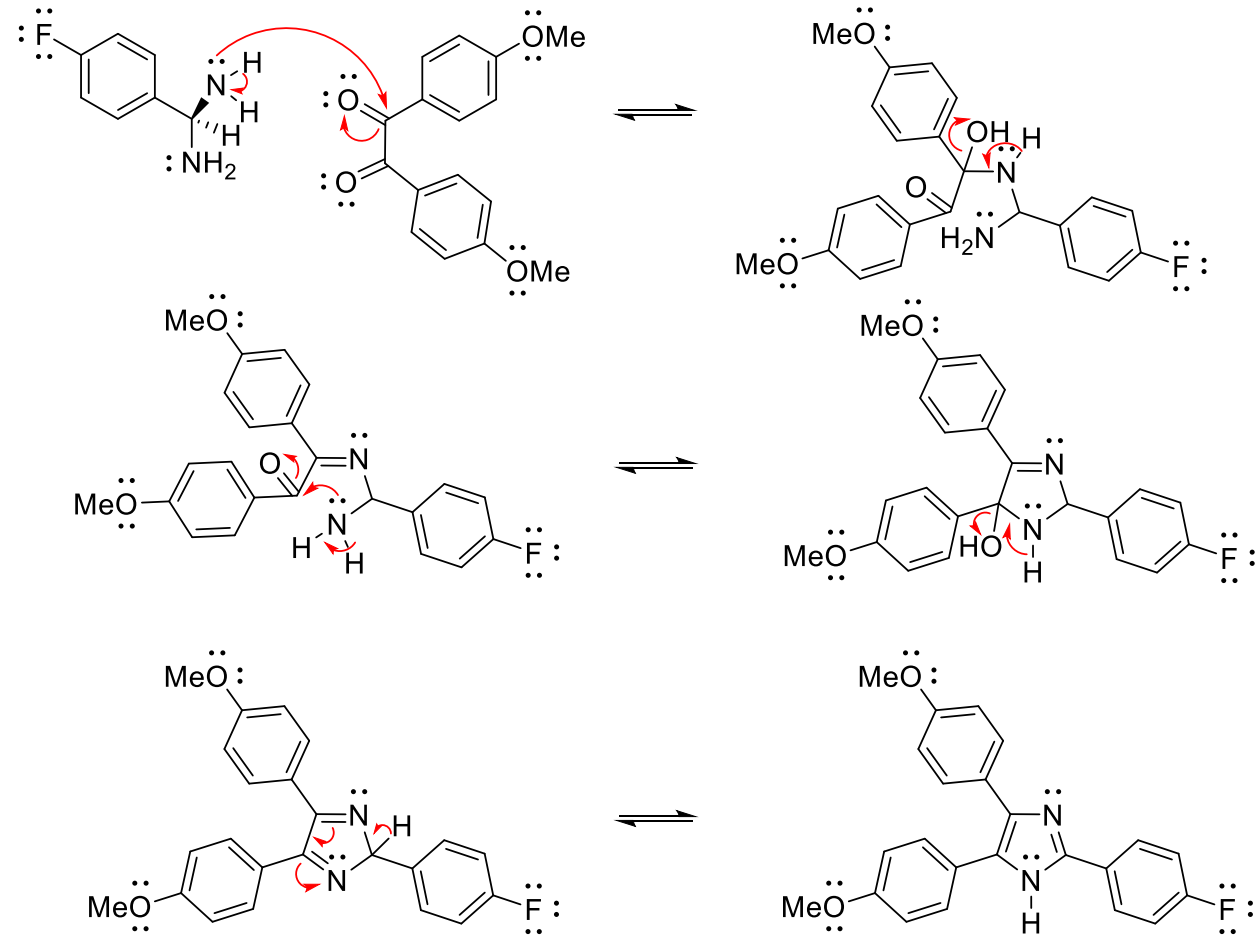


2,4,5-Trifenil-1*H*-imidazol

# Síntesis de imidazoles- Mecanismo



# Mecanismo



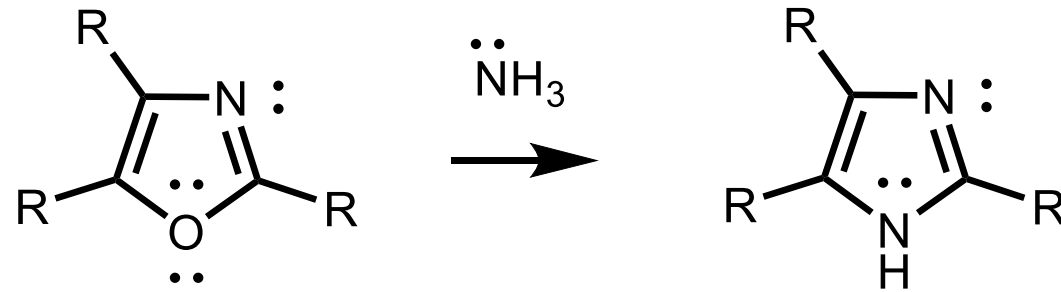
2-(4-Fluorofenil)-4,5-bis(4-metoxifenil)-1H-imidazol



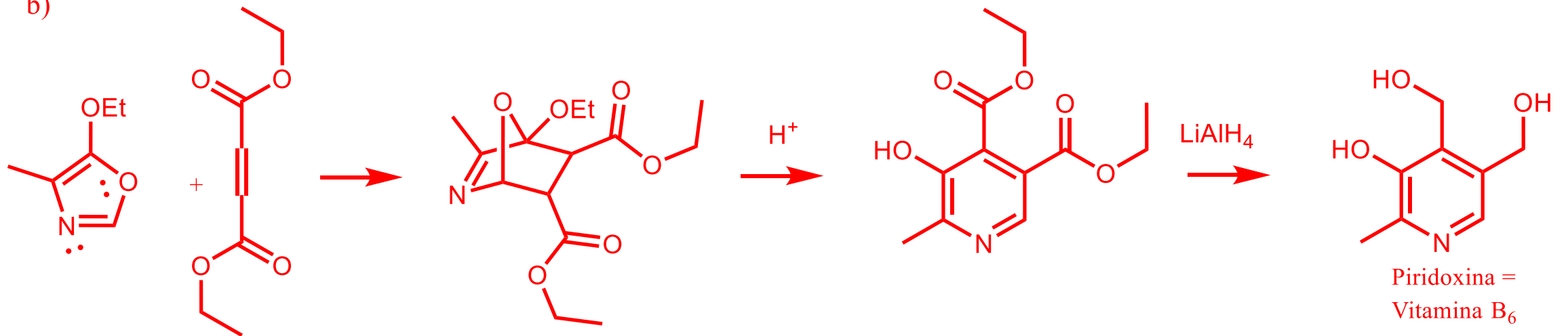
# Oxazol-reacciones:

- a) apertura del ciclo (muy propenso a SNA);  
b) como dieno

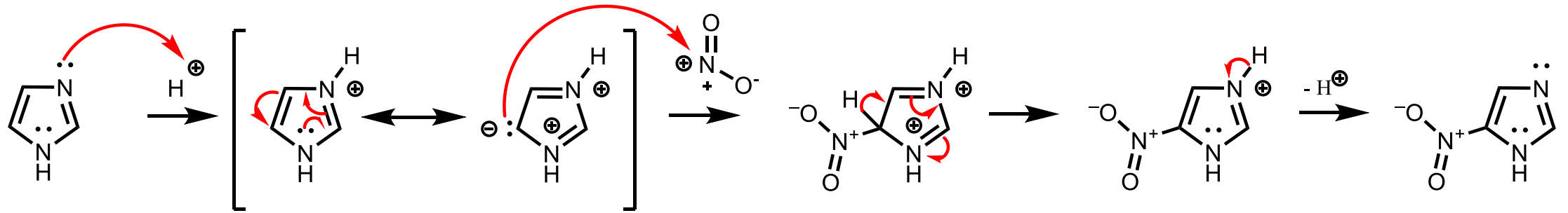
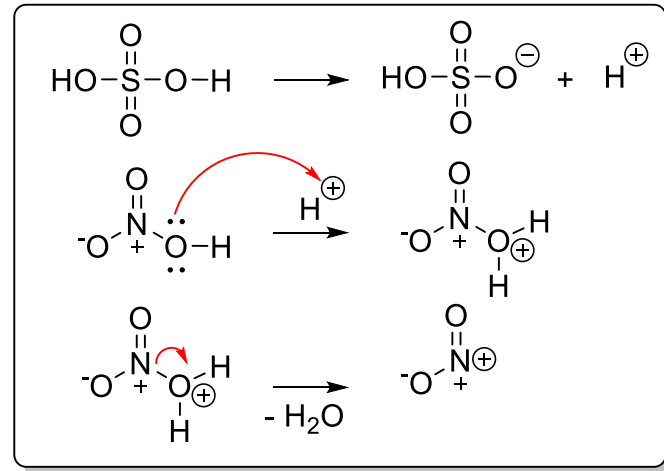
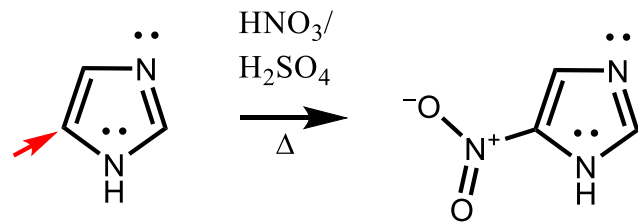
a)



b)

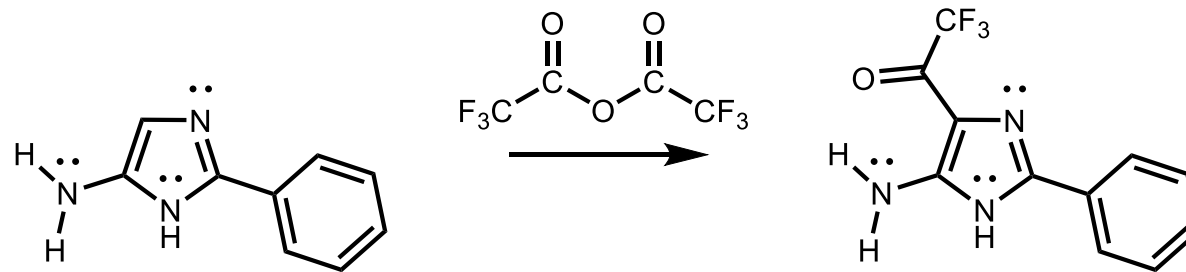


# Imidazol-reacciones



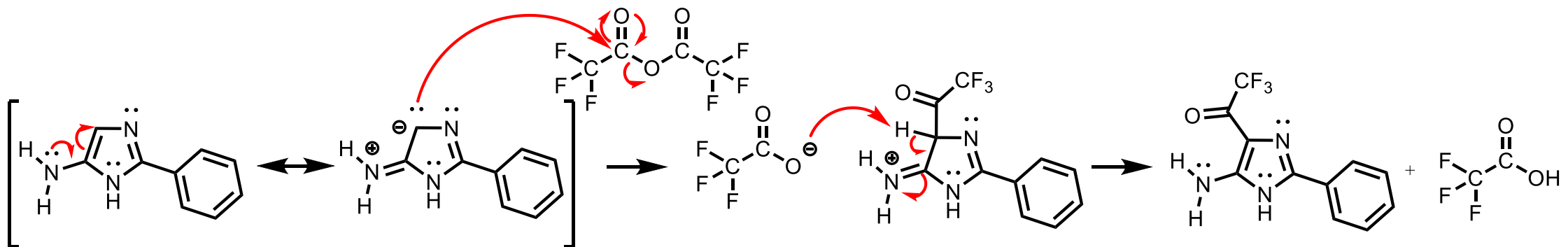
# Imidazol-reacciones

## Efecto de los grupos activantes



2-Fenil-5-amino-1*H*-imidazol

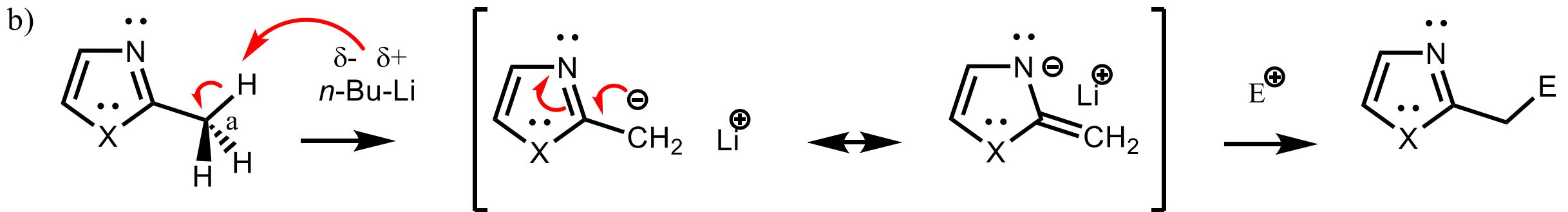
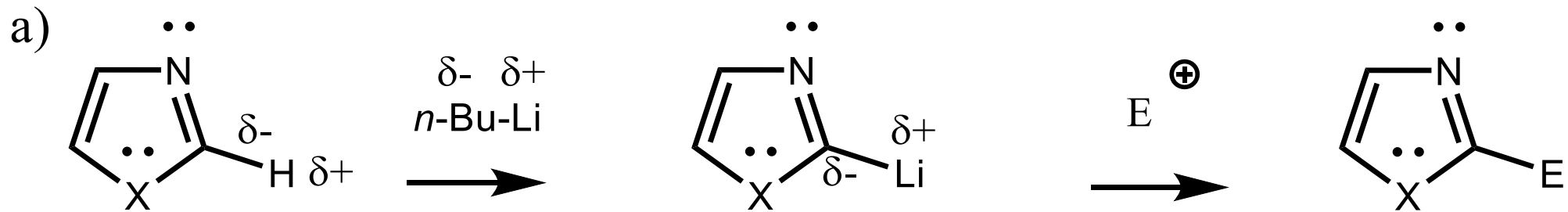
2-Fenil-4-trifluoroacetil-5-amino-1*H*-imidazol



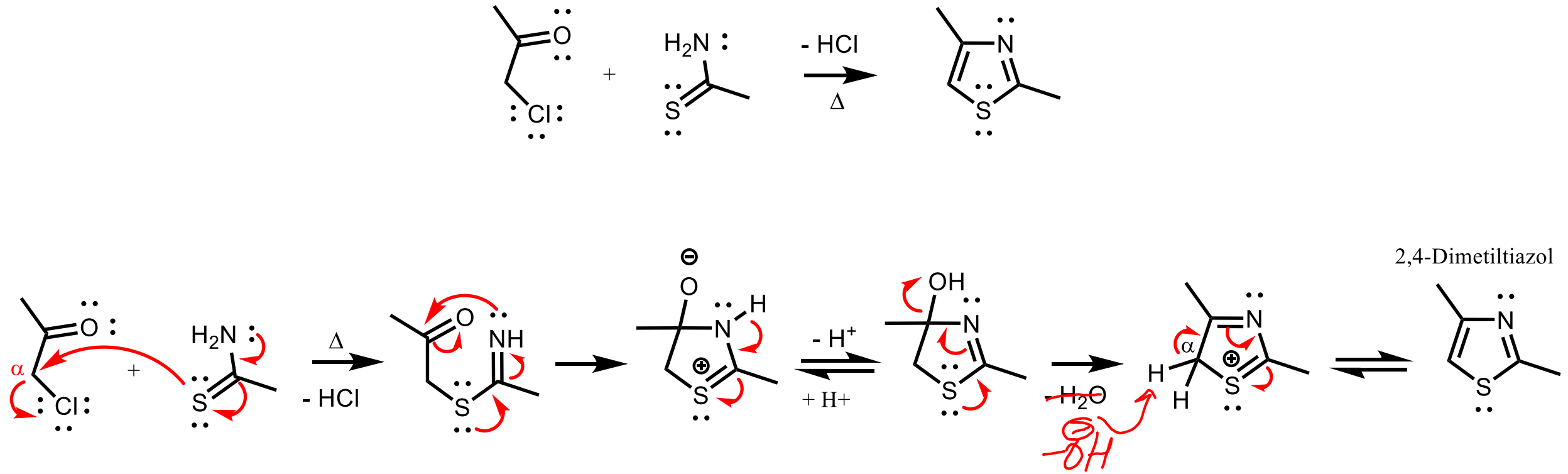
# Metalación

a) Formación de  $\alpha$ -aniones

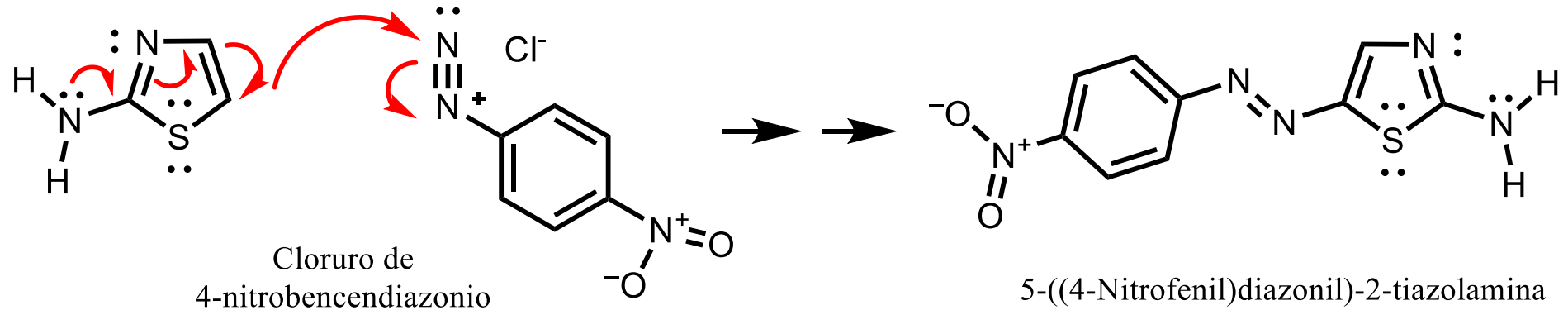
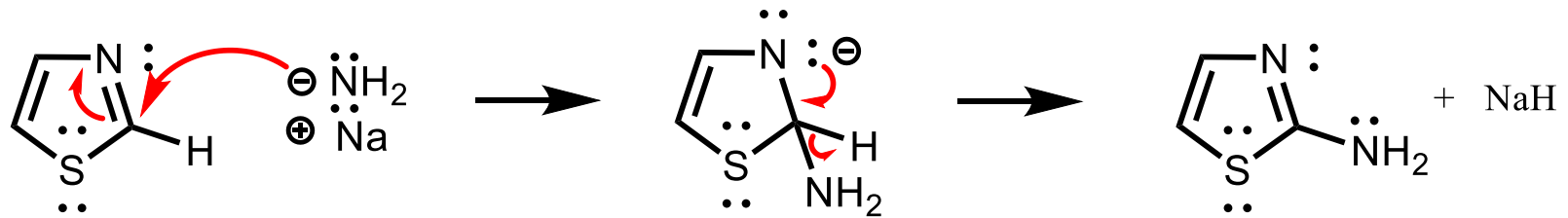
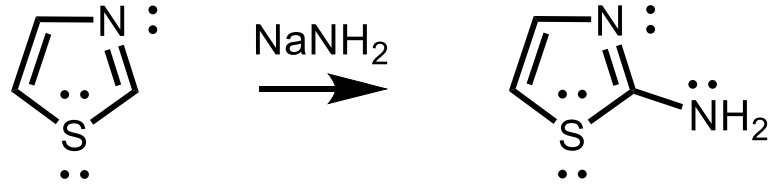
b) formación de aniones en  $-\text{CH}_3$



# Tiazol



# SNA



# SNA

