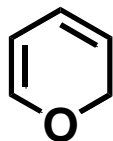
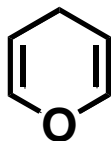


# TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

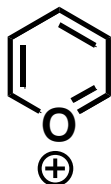
Sistemas hexagonales oxigenados. Generalidades.



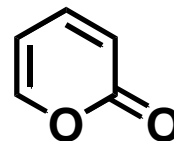
**2H-Pirano**



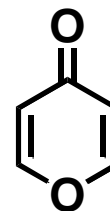
**4H-Pirano**



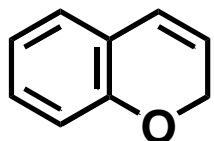
**Pirilio**



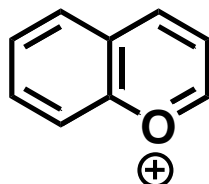
**Piran-2-ona**



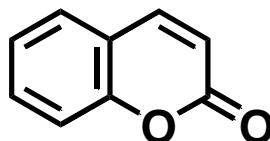
**Piran-4-ona**



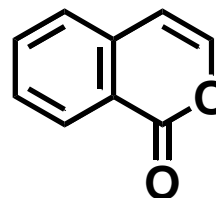
**2H-Cromano**



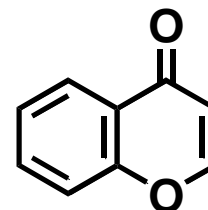
**Cromilio**



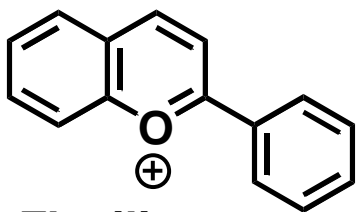
**Cumarina**



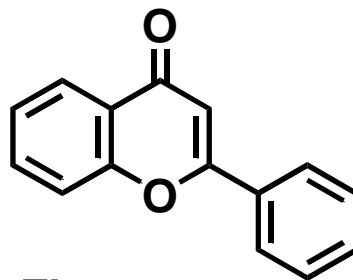
**Isocumarina**



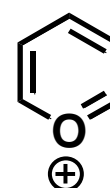
**Cromona**



**Flavilio  
(Antocianidinas)**



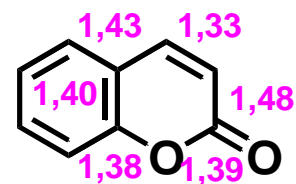
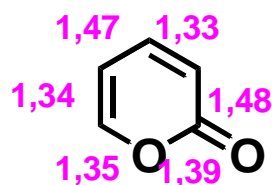
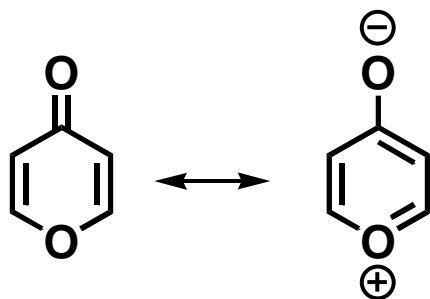
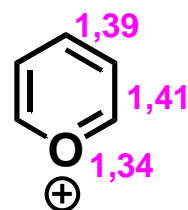
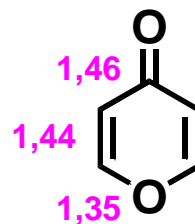
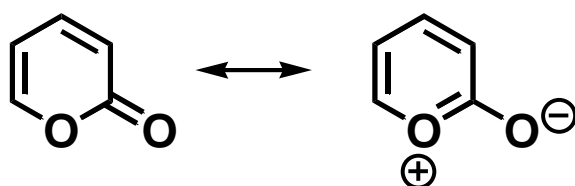
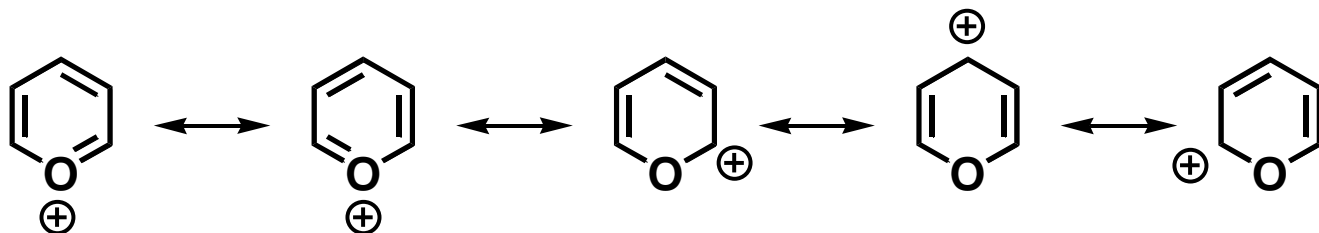
**Flavonas**



**Tiopirilio**

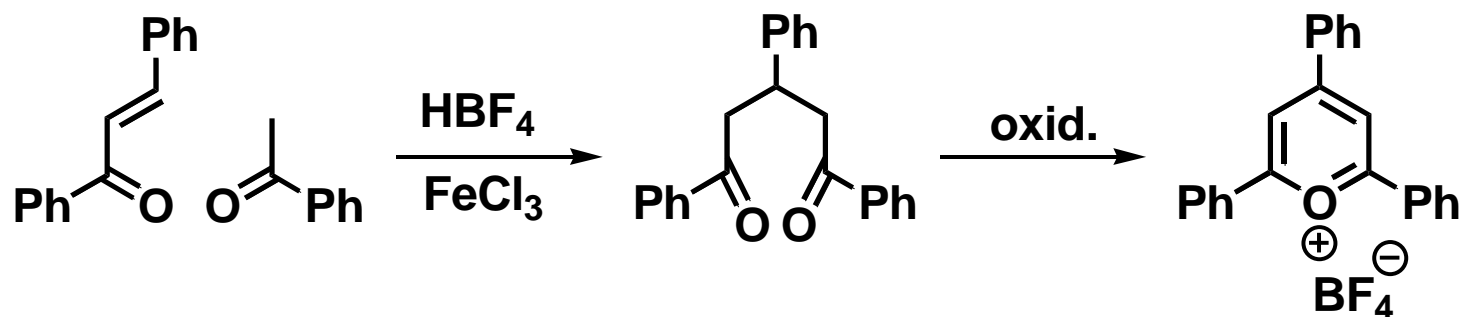
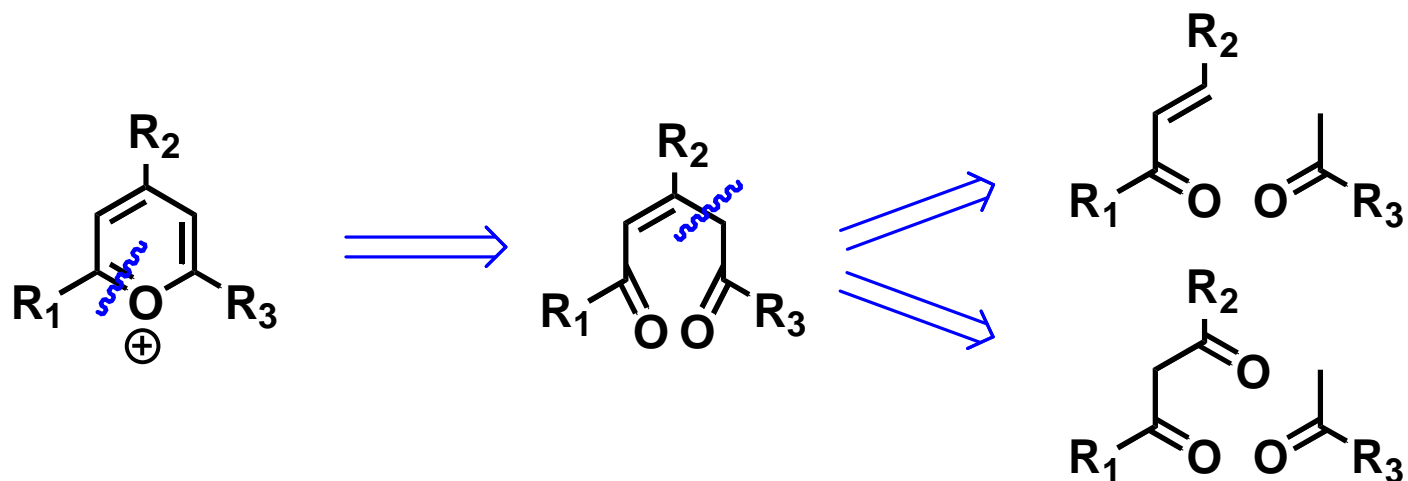
# TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

## Sistemas hexagonales oxigenados. Generalidades.

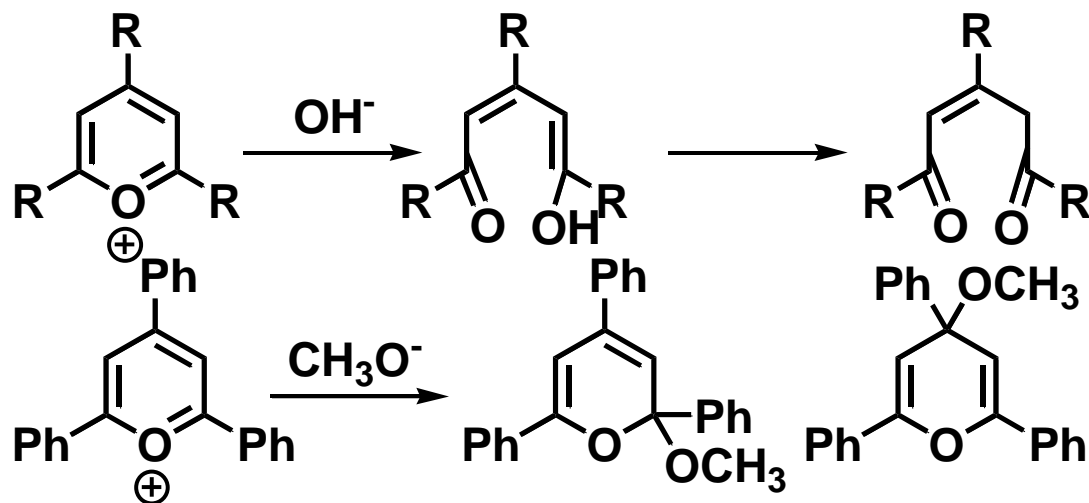
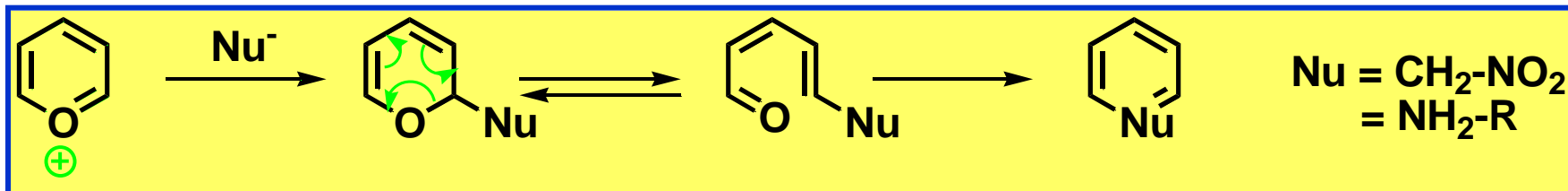


# TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

Piranos y sales de pirilio.

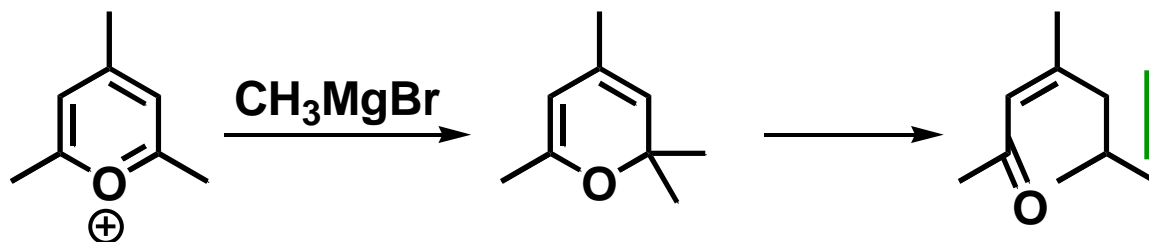
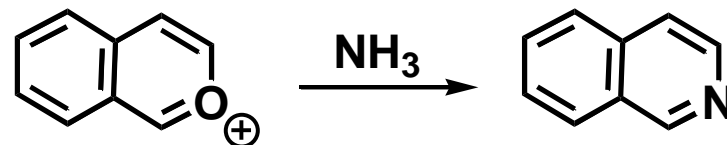


Por estar cargados positivamente reaccionan adicionando nucleófilos



**NUCLEÓFILOS OXIGENADOS**

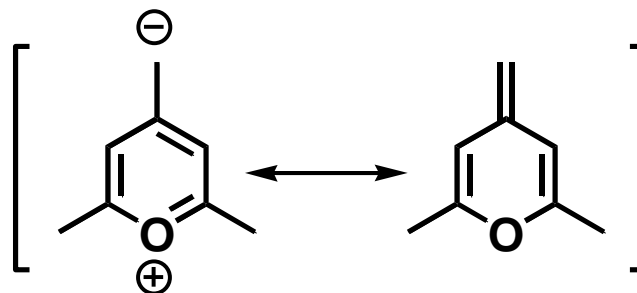
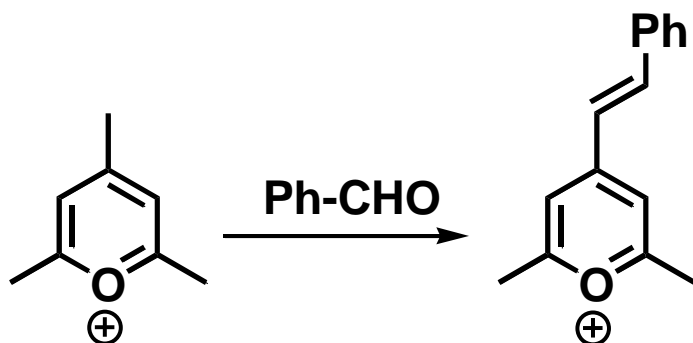
**NUCLEÓFILOS NITROGENADOS**



**NUCLEÓFILOS de CARBONO**

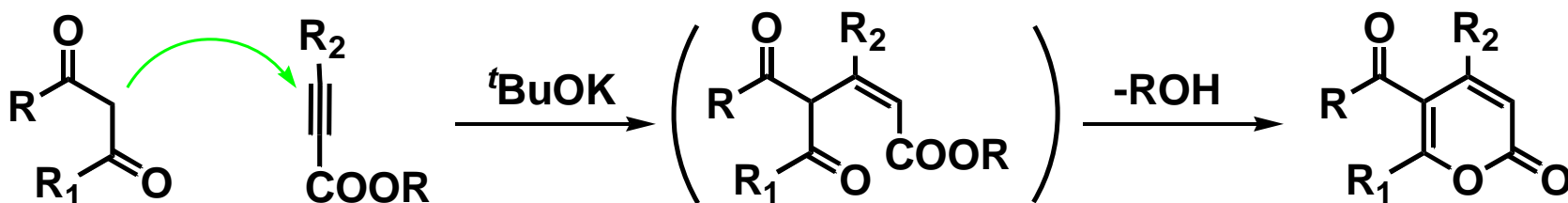
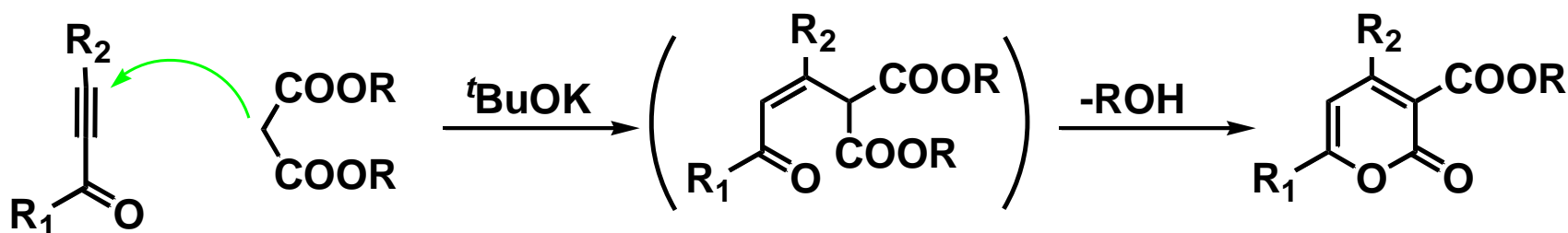
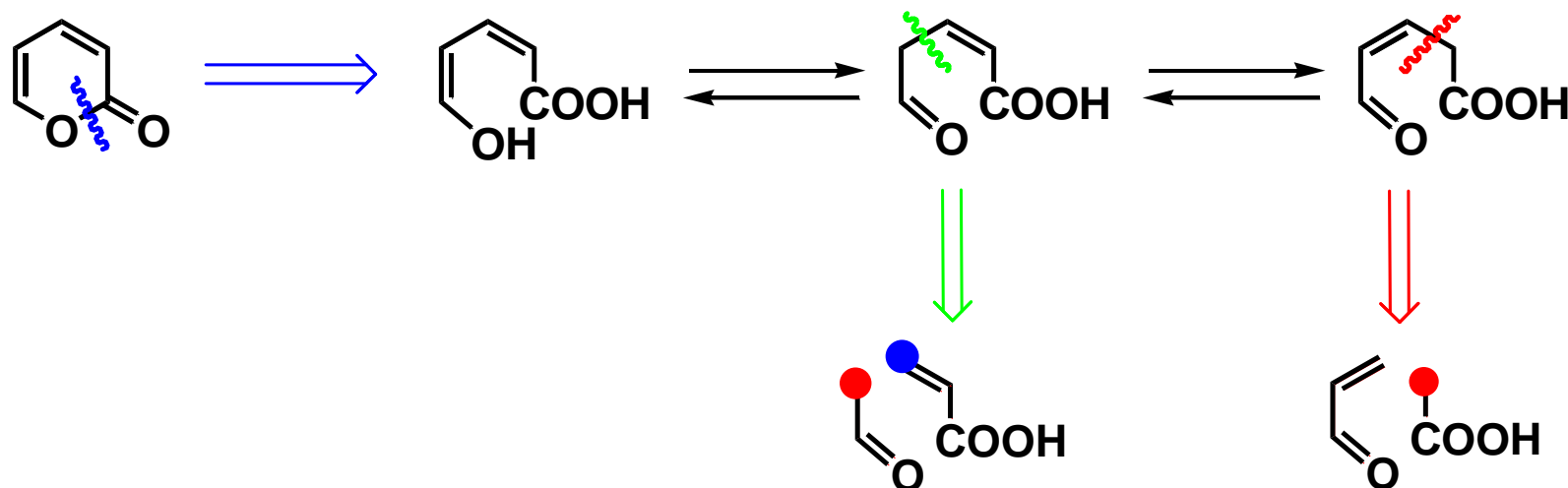
Debido a la presencia de la carga positiva, también pueden favorecer la desprotonación, generando especies estabilizadas y que reaccionan como nucleófilos.

Teniendo en cuenta las diferencias, las sales de pirilio tienen un comportamiento parecido a las piridinas y sales de piridinio.

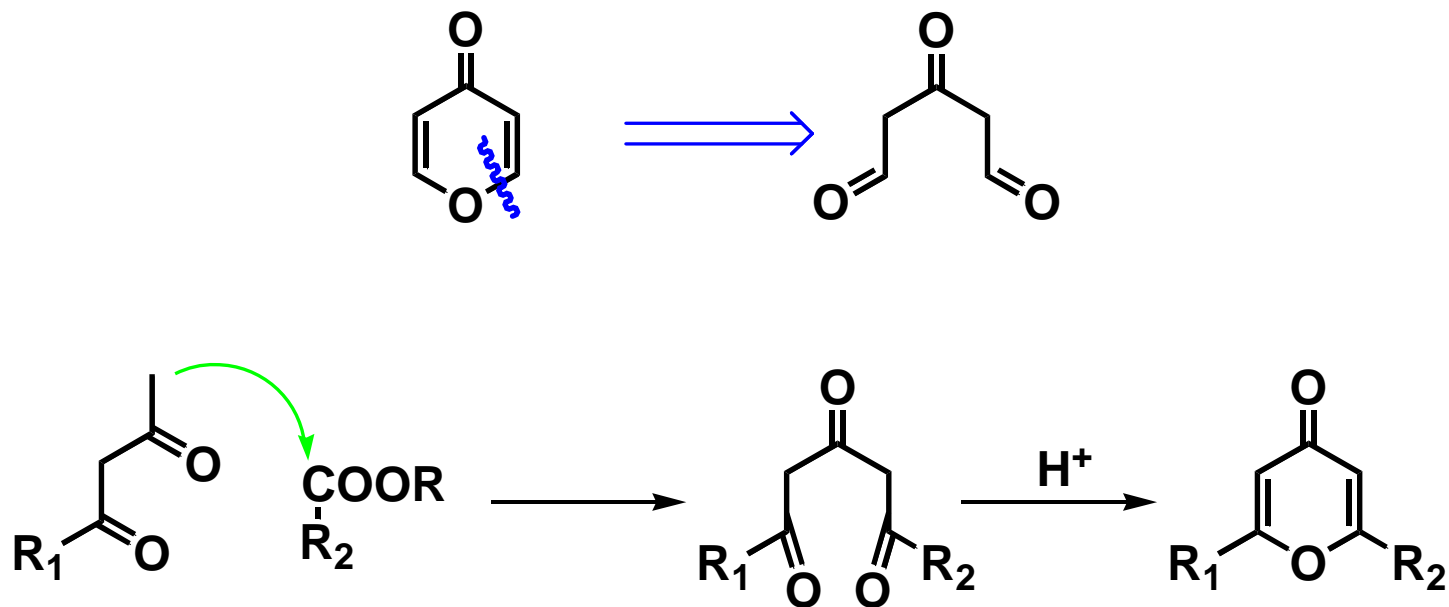


# TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

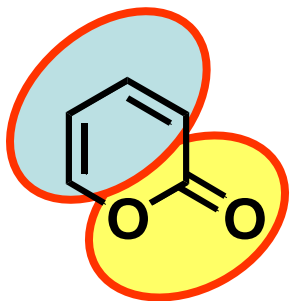
## 2- y 4- Piranonas. Síntesis.



La estructura de estos compuestos está relacionada sintéticamente con la las sales de pirilio, estando los intermediarios de síntesis muy relacionados para ambos tipos de compuestos.

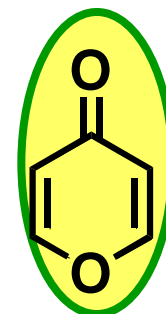


TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS  
2- y 4- Piranonas. Reactividad.

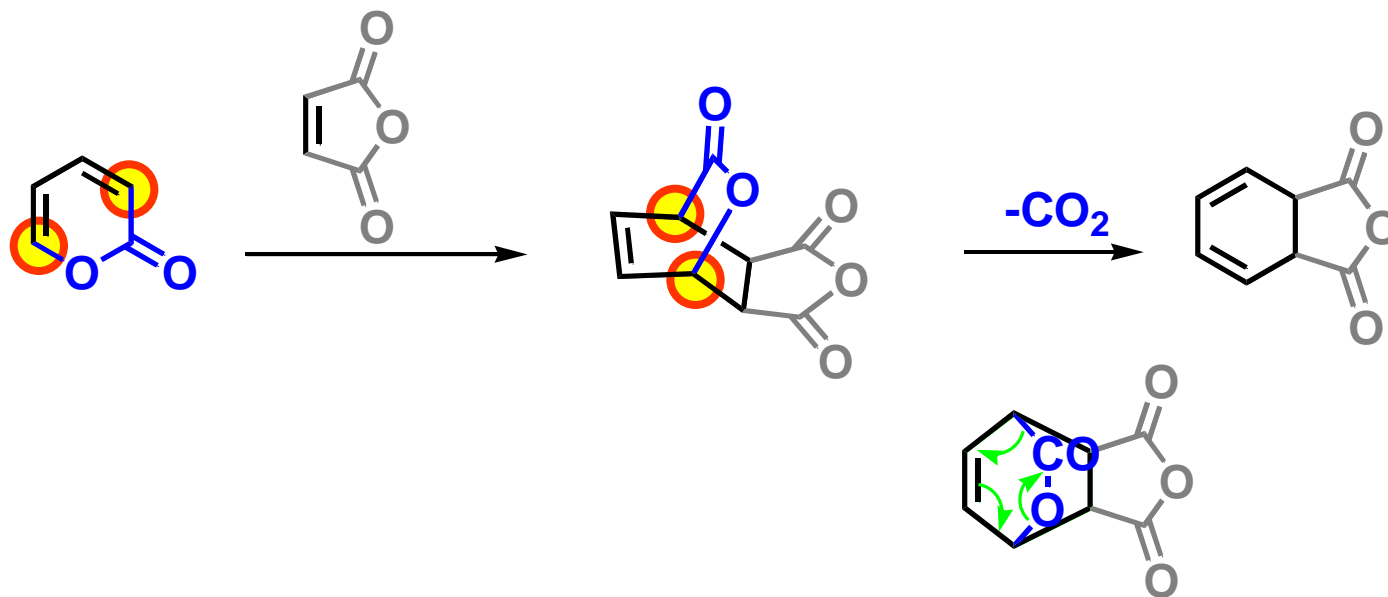


Reacciona fundamentalmente como:

- **Dieno conjugado**
- **Lactona**



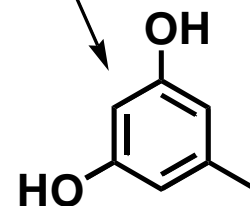
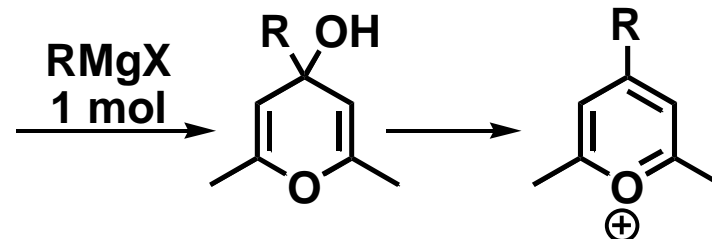
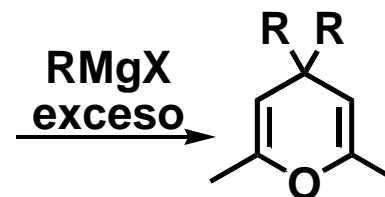
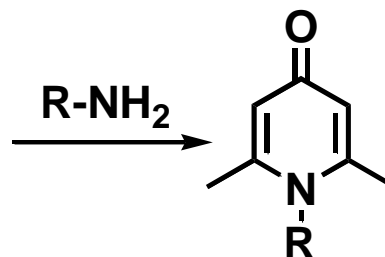
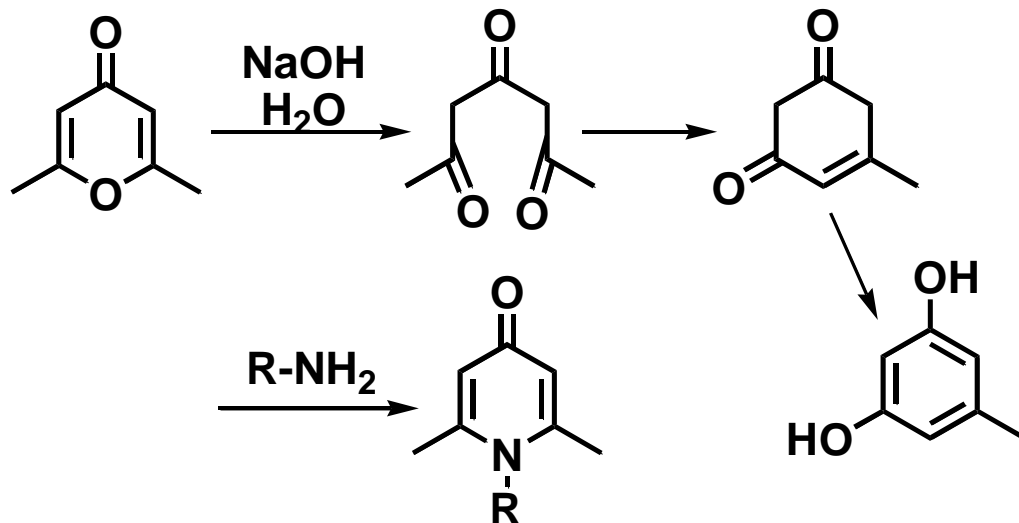
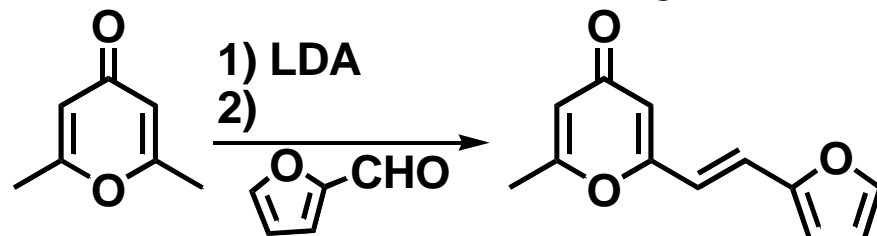
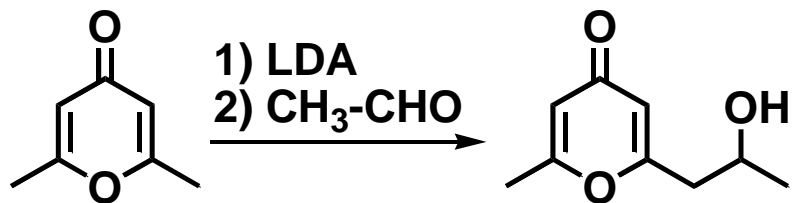
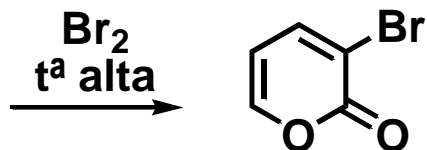
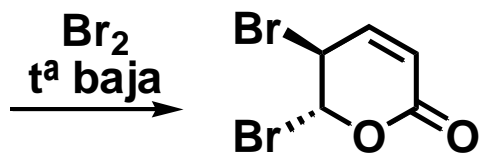
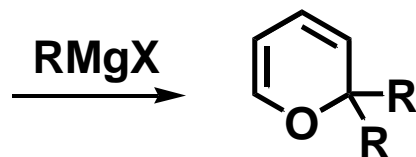
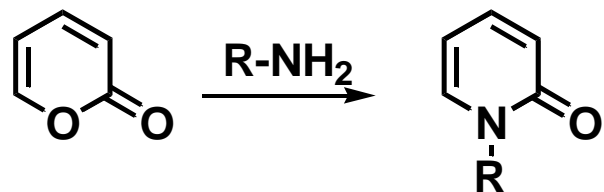
Reacciona fundamentalmente como:  
**Cetona conjugada**





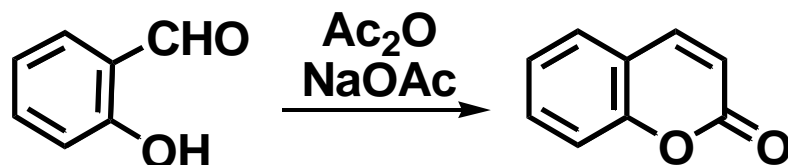
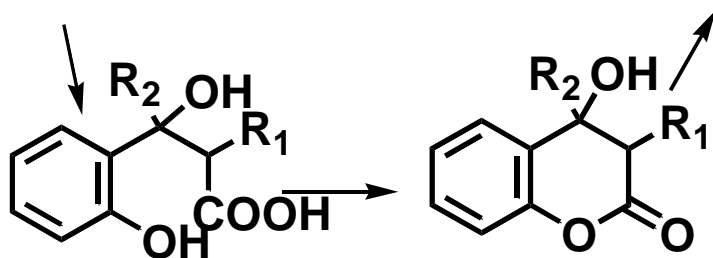
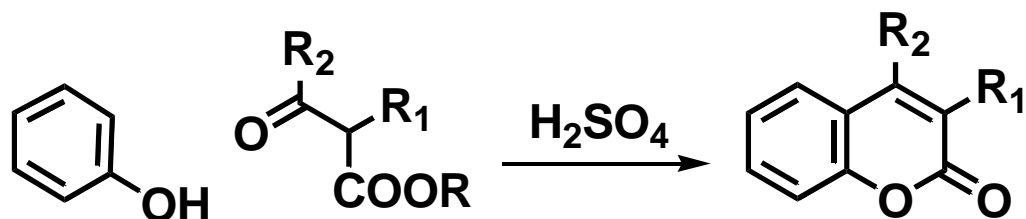
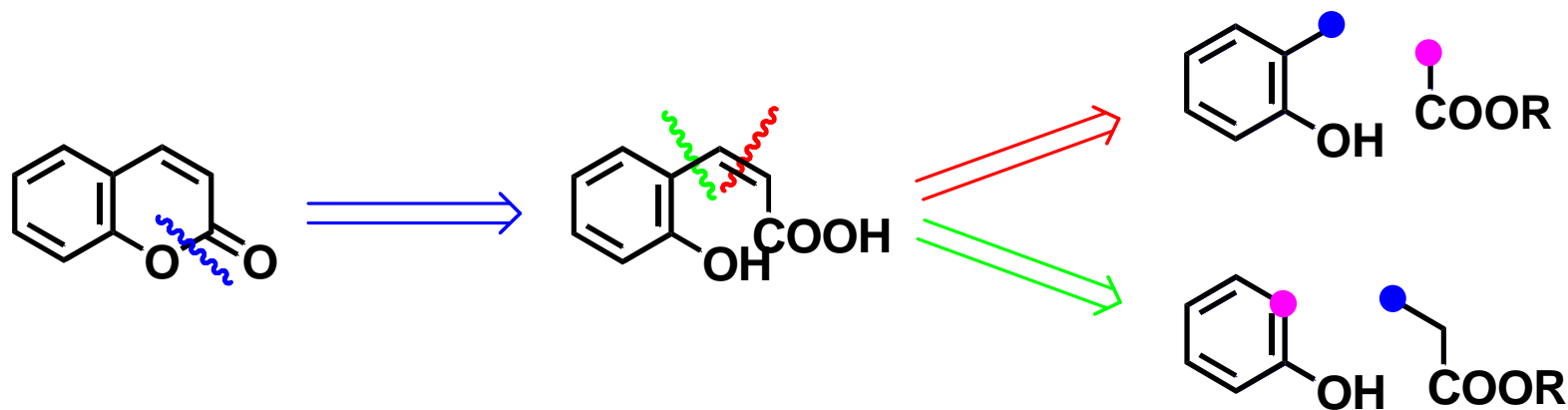
# TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

## 2- y 4- Piranonas. Reactividad.



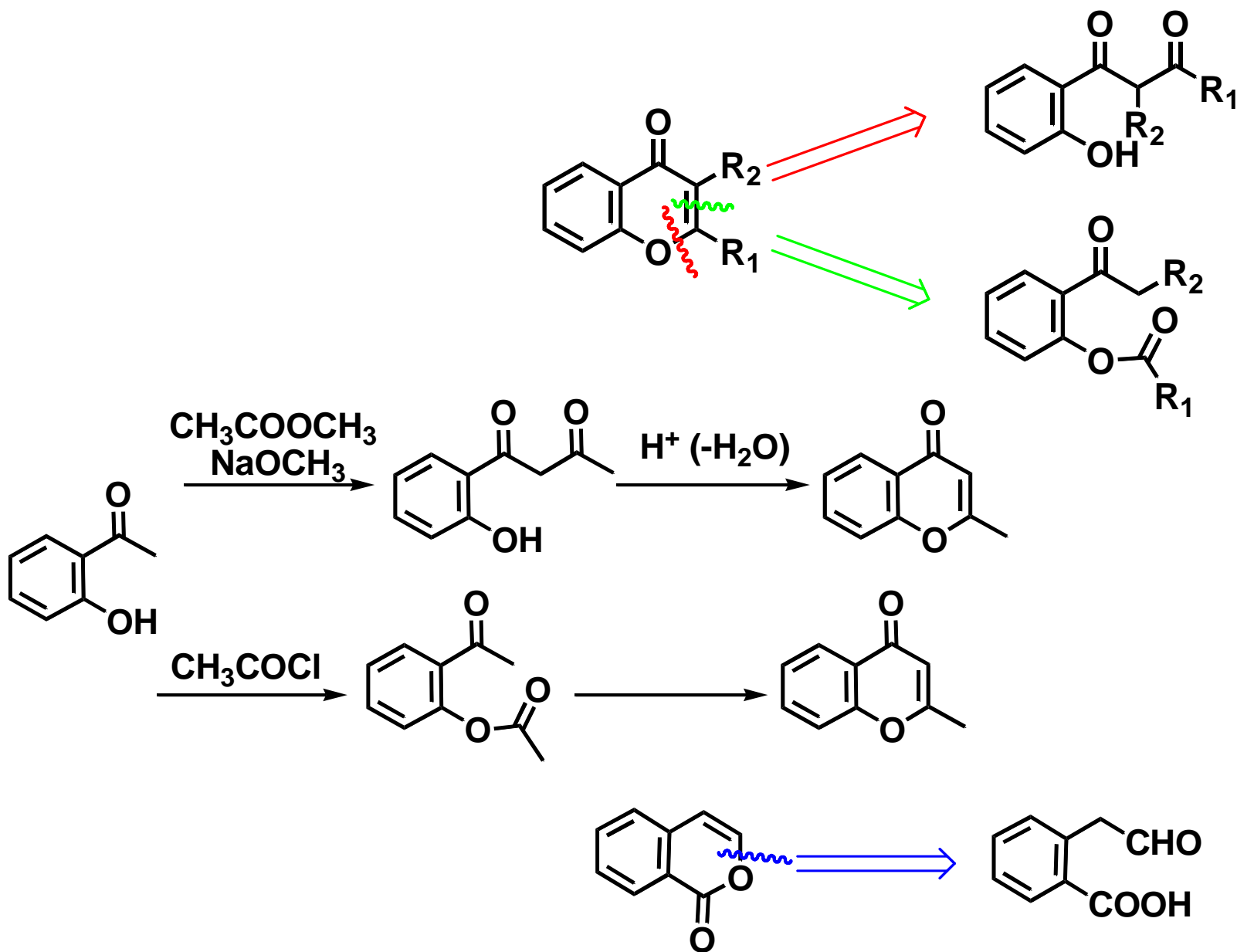
# TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

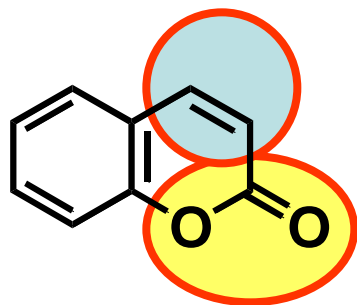
Cromonas, cumarinas e isocumarinas. Síntesis.



## TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

Cromonas, cumarinas e isocumarinas. Síntesis.

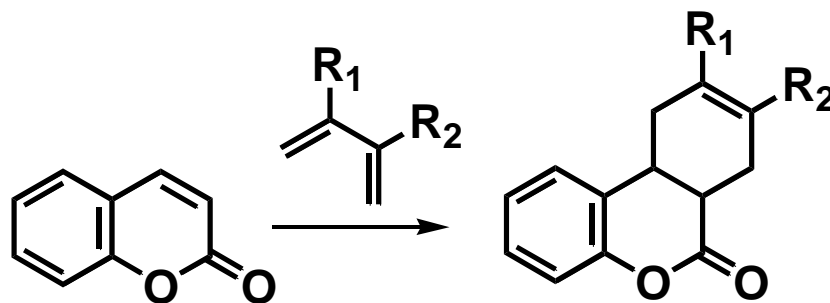
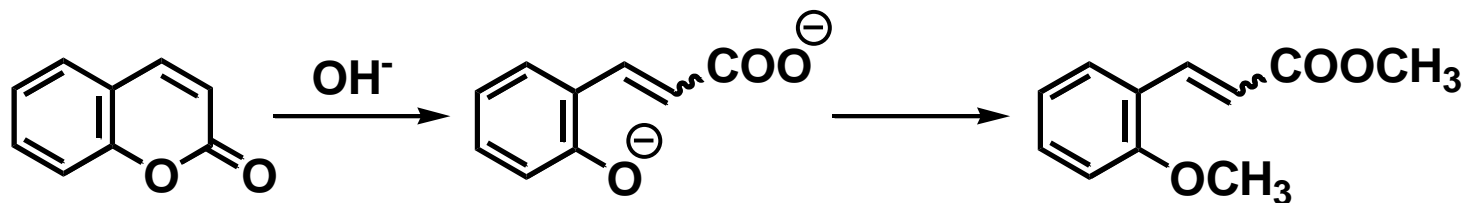
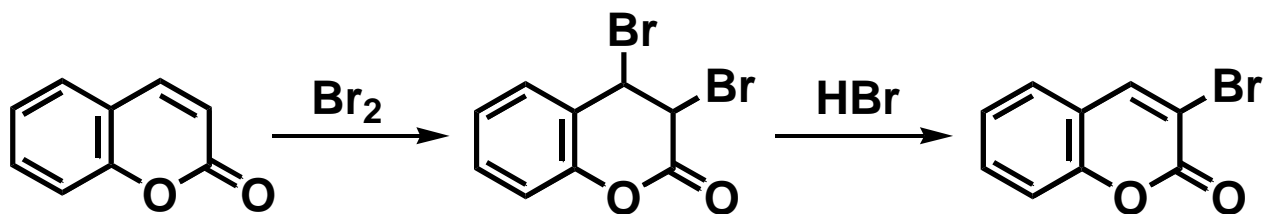




Reacciona fundamentalmente como:

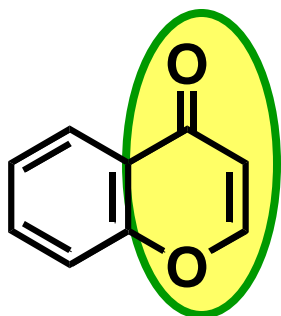
-- Doble enlace

-- Lactona



## TEMA 12: SISTEMAS HEXAGONALES OXIGENADOS Y SUS BENZODERIVADOS

Cromonas, cumarinas e isocumarinas. Reactividad.



Reacciona fundamentalmente como:  
**Cetona conjugada**

