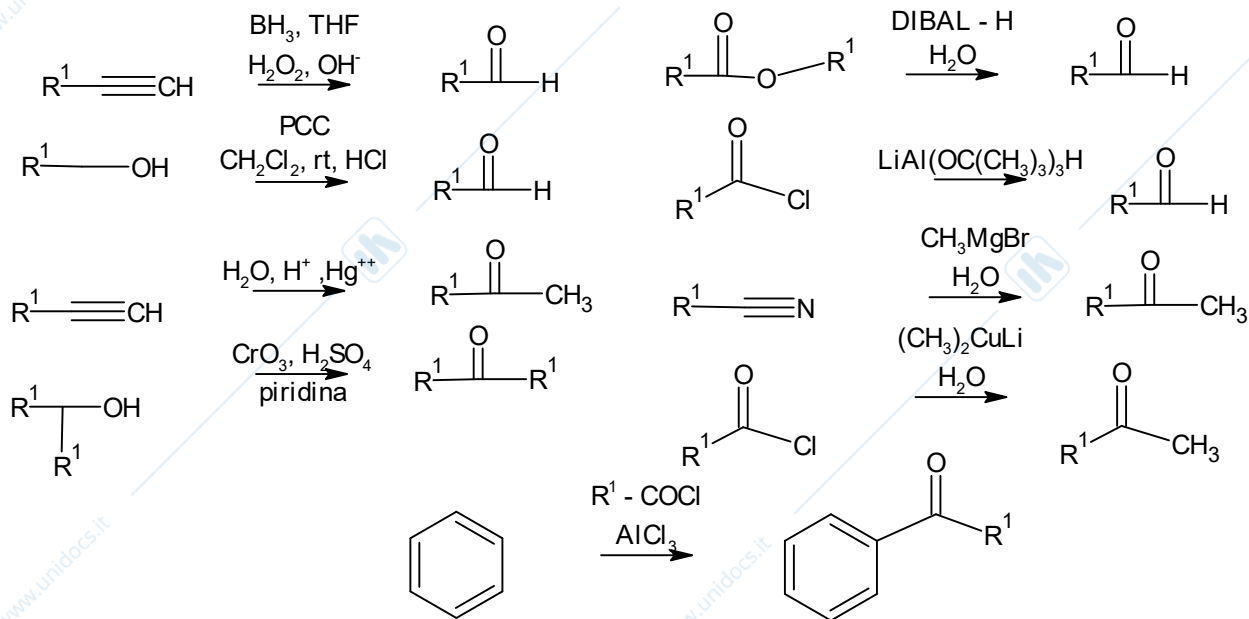
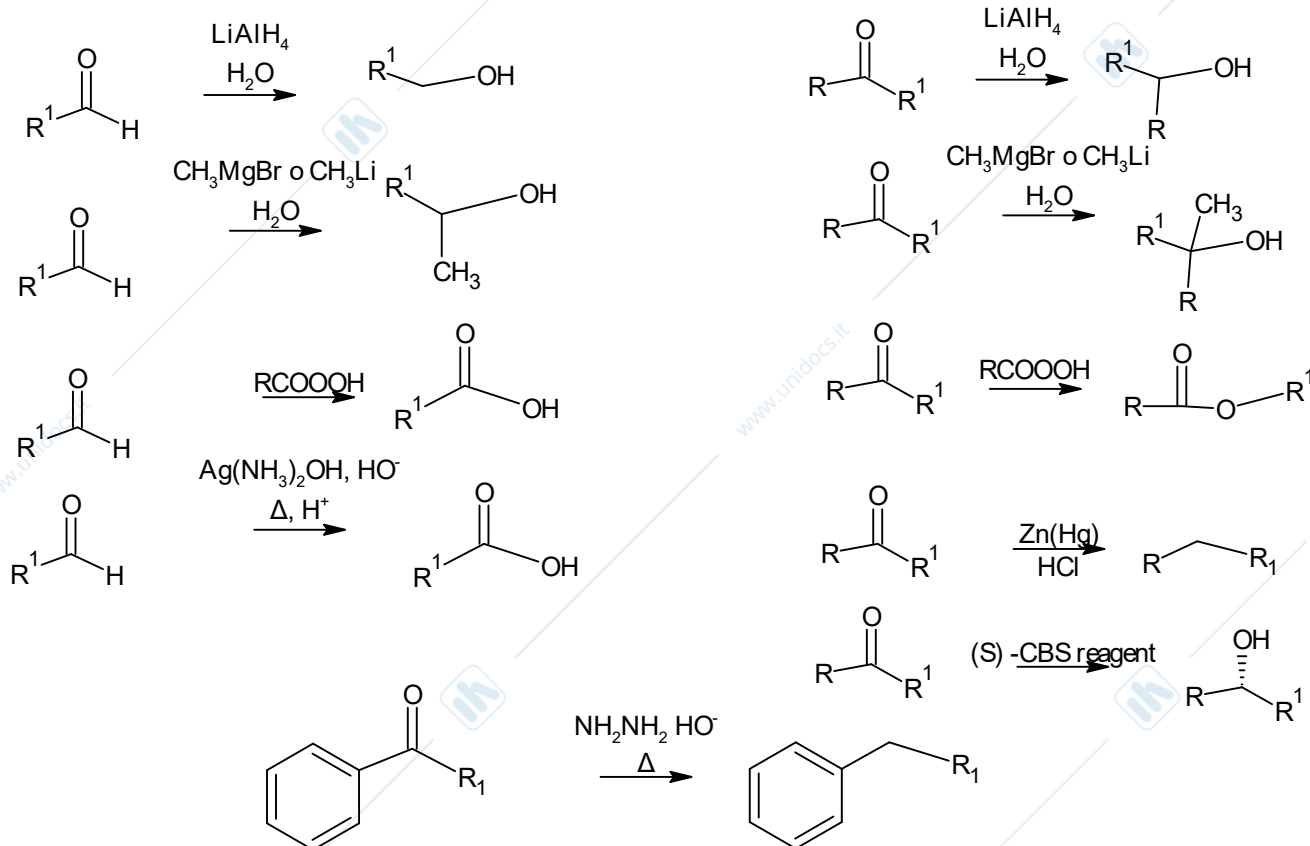


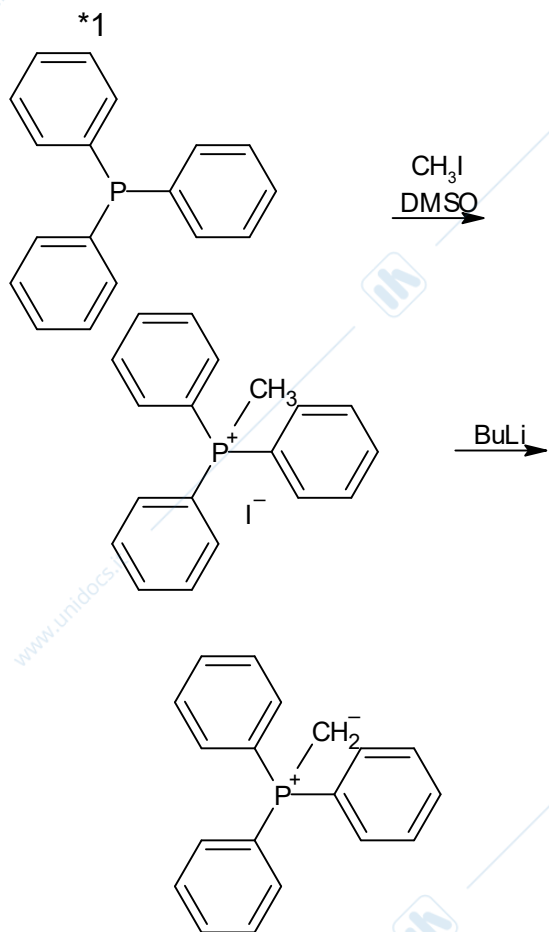
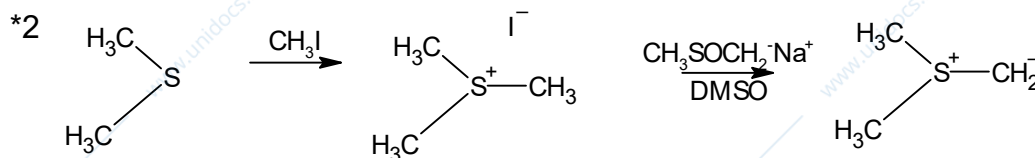
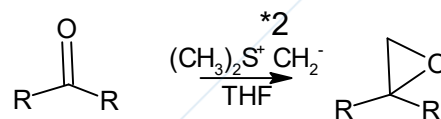
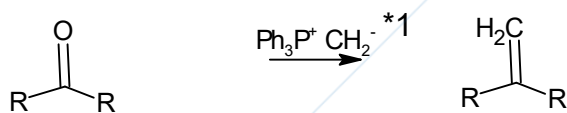
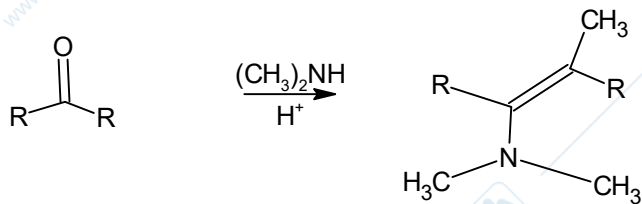
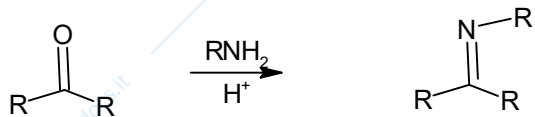
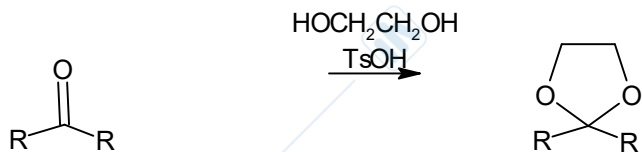
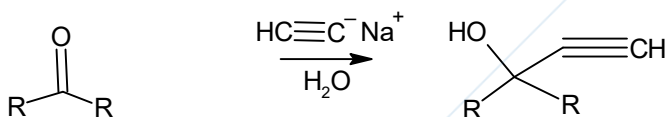
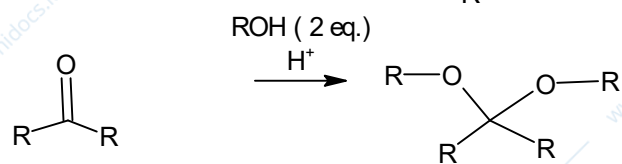
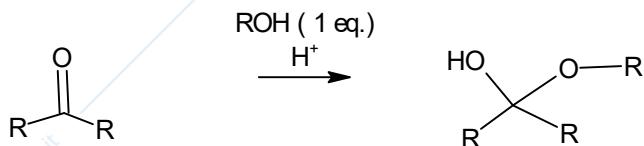
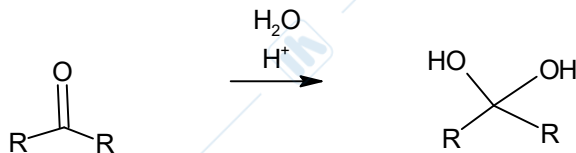
### Aldeidi e chetoni (sintesi)



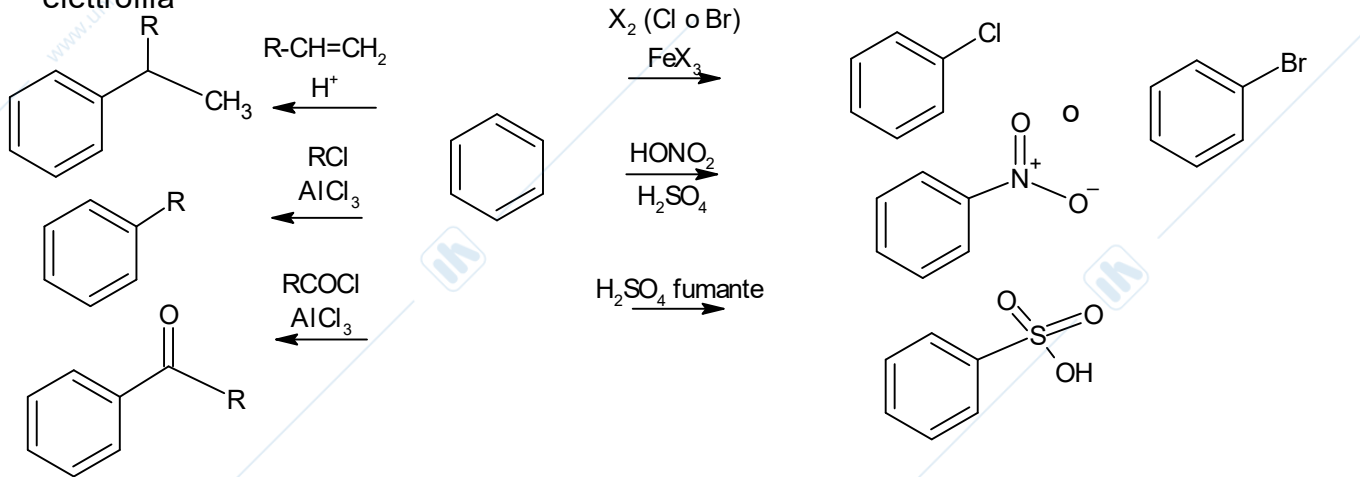
### Aldeidi e chetoni reazioni ossidoriduzione



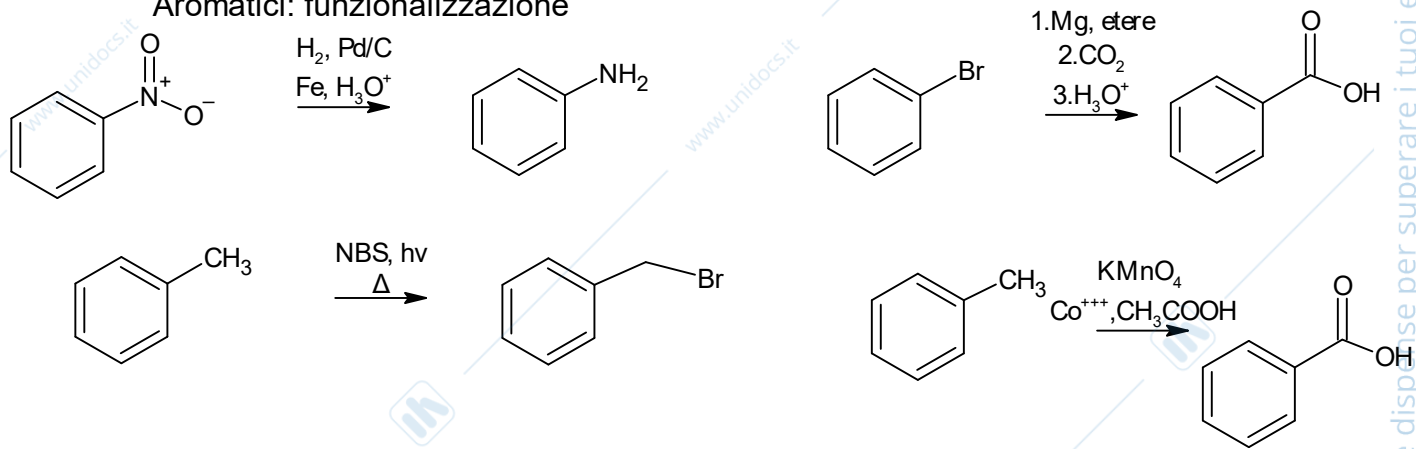
Composti carbonilici reazioni con nucleofili



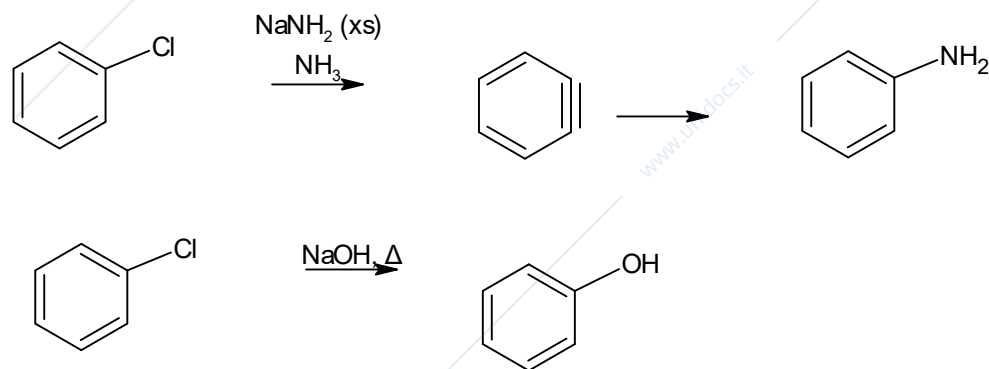
**Aromatici: sostituzione elettrofila**



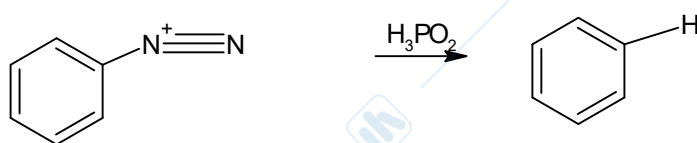
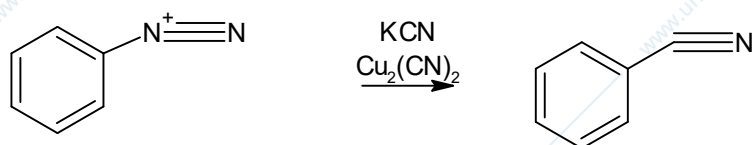
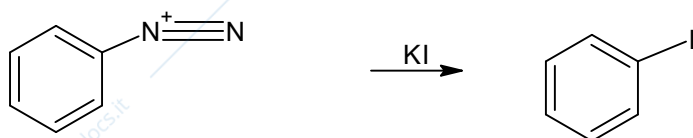
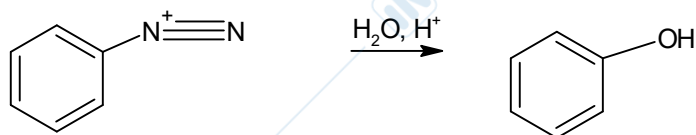
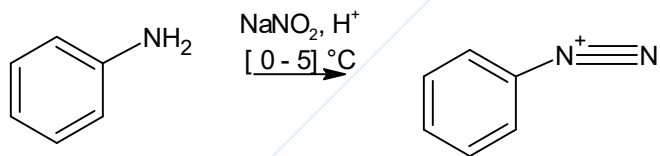
**Aromatici: funzionalizzazione**



**Aromatici sostituzione nucleofila 1**

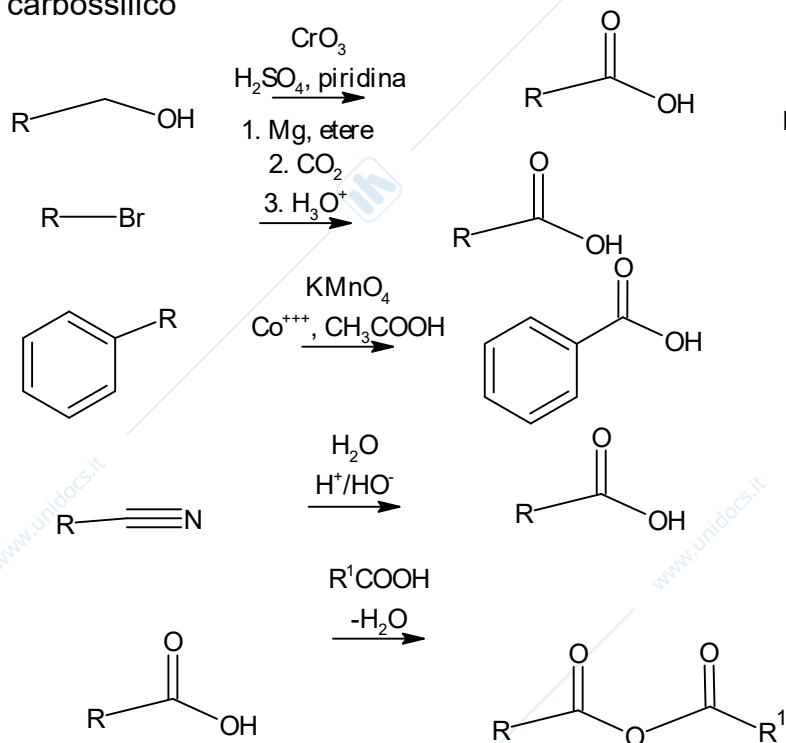


## Aromatici sostituzione nucleofila 2

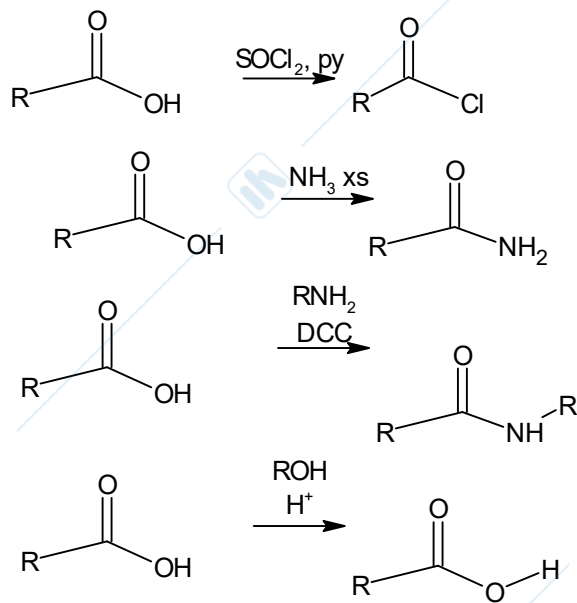


## Acidi carbossilici e derivati

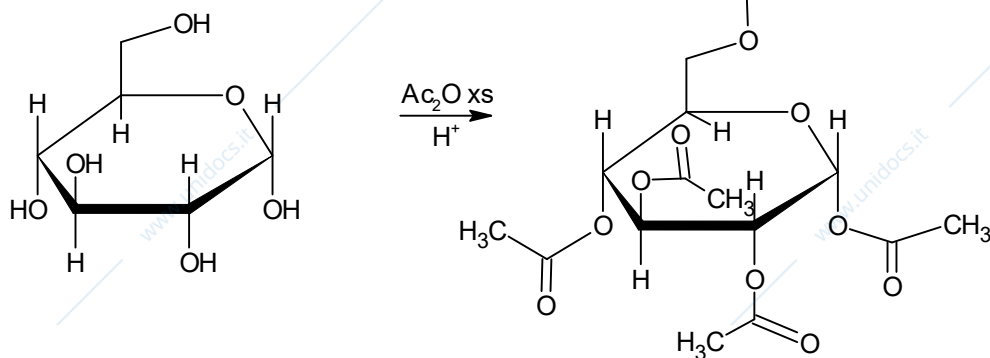
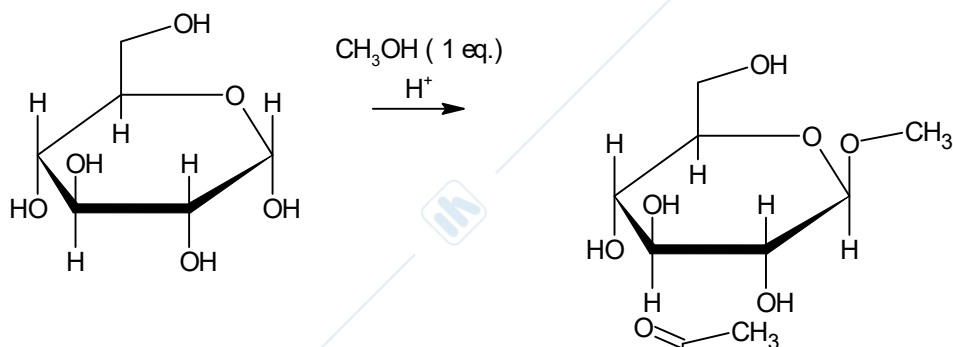
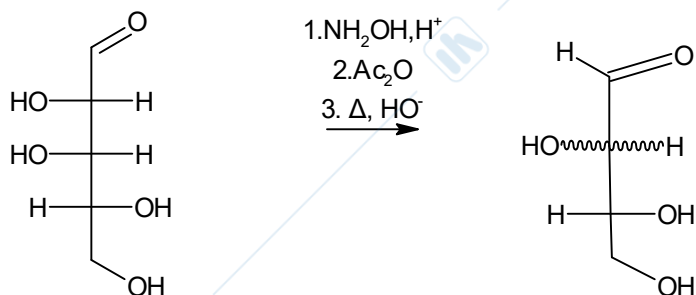
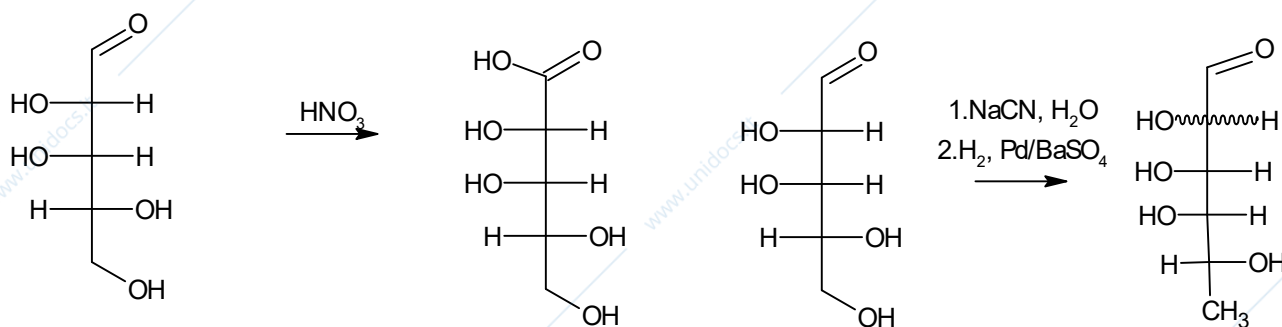
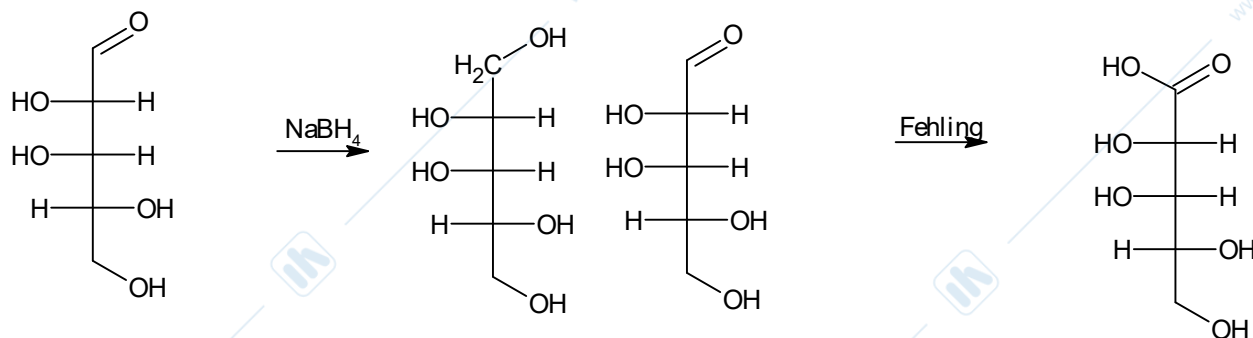
### Sintesi di un acido carbossilico



### Sintesi di alcuni derivati

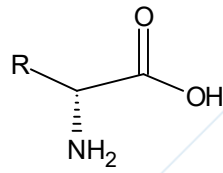


zuccheri : reazioni varie

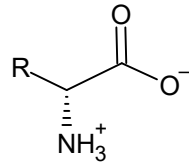


## Aminoacidi

Se la catena laterale possiede dei gruppi carbossilici il pI scende a 2-3



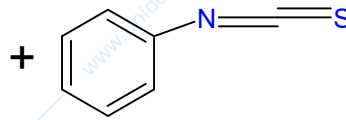
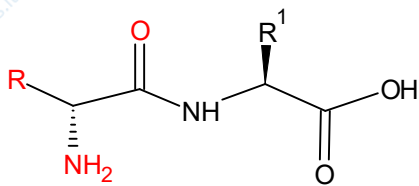
Se la catena laterale non possiede gruppi laterali pH dipendenti il pI di buona parte degli aminoacidi è circa 6



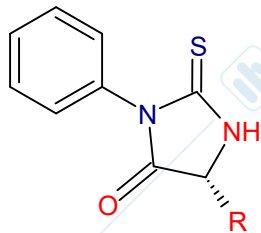
Se la catena laterale possiede gruppi amminici o imminici il pI sale a 10-11

## Saggi degli aminoacidi

### Degradazione di Edman

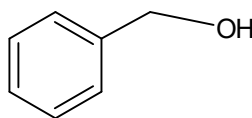
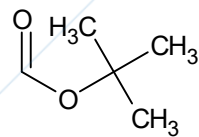


$\Delta$ , acid  $\rightarrow$



## Gruppi protettori degli aminoacidi

BOC per le ammine  
Bn per gli acidi



### Sintesi degli aminoacidi

