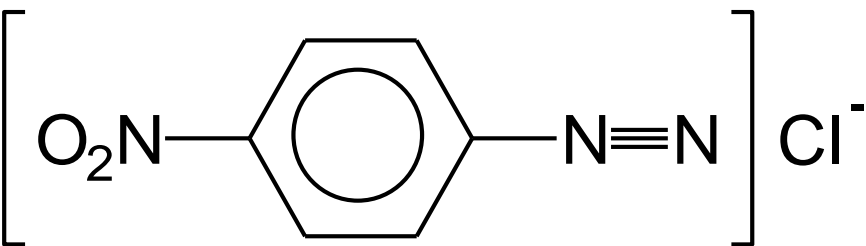


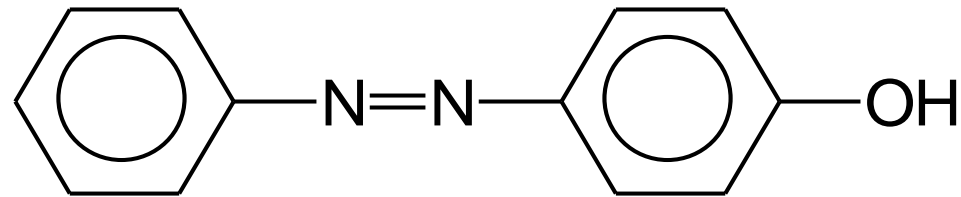
***Tema:* Diazo- și azocompuși**

În moleculele diazocompușilor **azogrupa** este legată cu **un radical organic**, iar în azocompuși – **cu doi radicali**.

Diazocompus



Azocompus

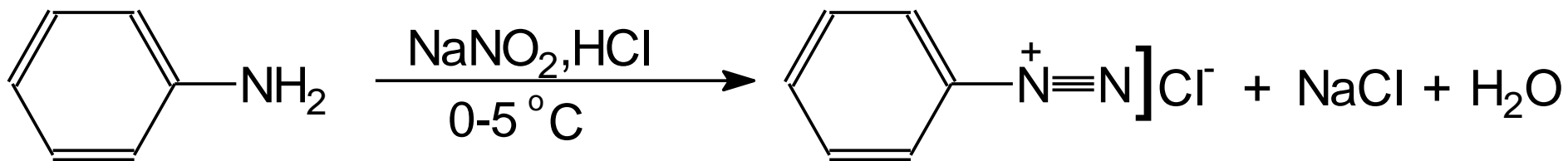


4-Hidroxiiazobenzen

Clorură de 4-nitrofenildiazoniu

Metode de obținere ale sărurilor de diazoniu

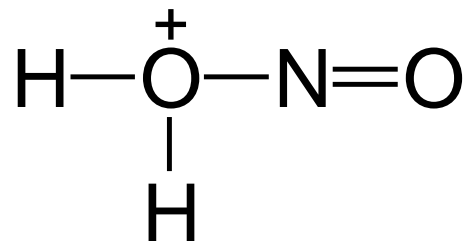
1. Reacția de diazotare.



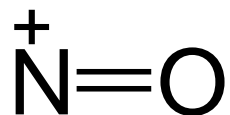
Anilină

Clorură de fenildiazoni

Mecanismul reacției de diazotare:



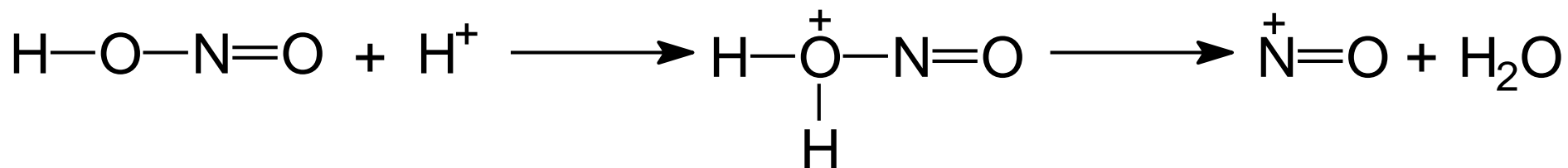
- acid azotos protonat

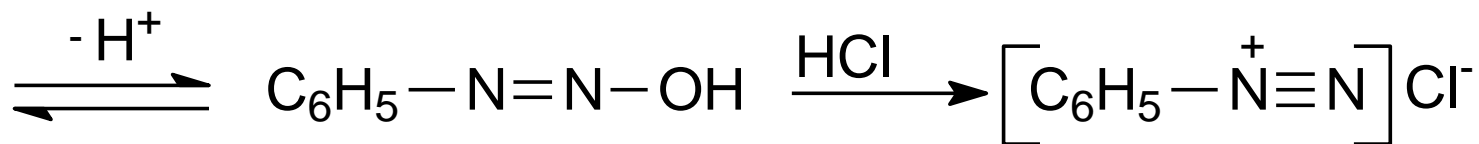
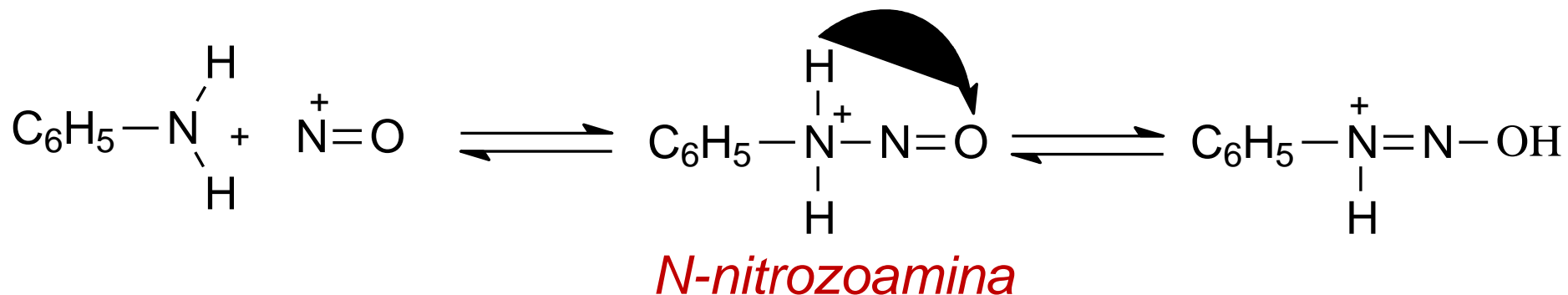


- cation de nitrozoni



- oxid de azot (III).





Arildiazohidroxid

Clorură de arildiazoniu

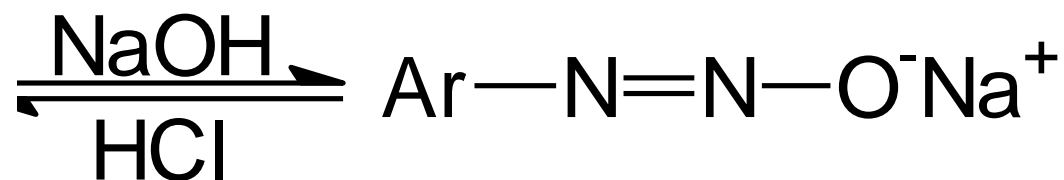


Mediu acid

Clorură de arildiazoniu

mediu neutru

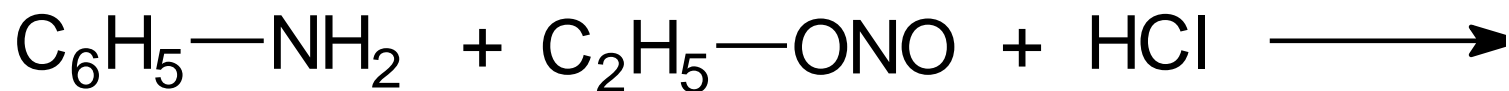
Arildiazohidroxid



Mediu bazic

Arildiazotat de Na

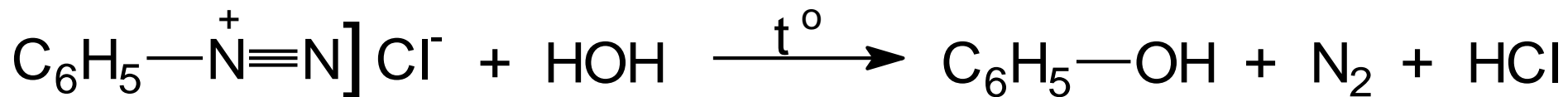
2. Interacțiunea aminelor aromatice primare cu alchilnitriți:



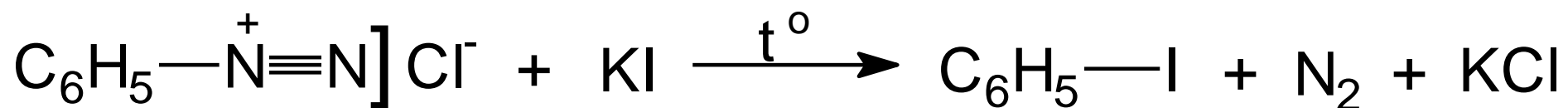
Proprietățile chimice ale sărurilor de diazoniu.

- A. Reacții cu eliminare de azot.

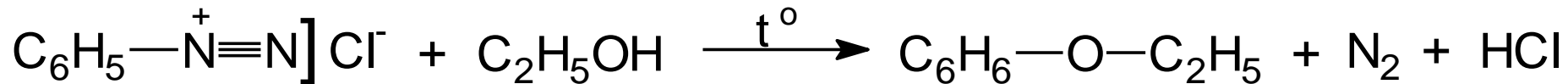
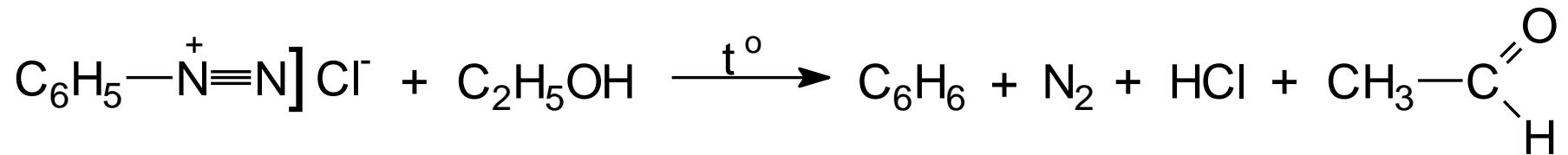
1. Substituția diazogrupei prin hidroxil

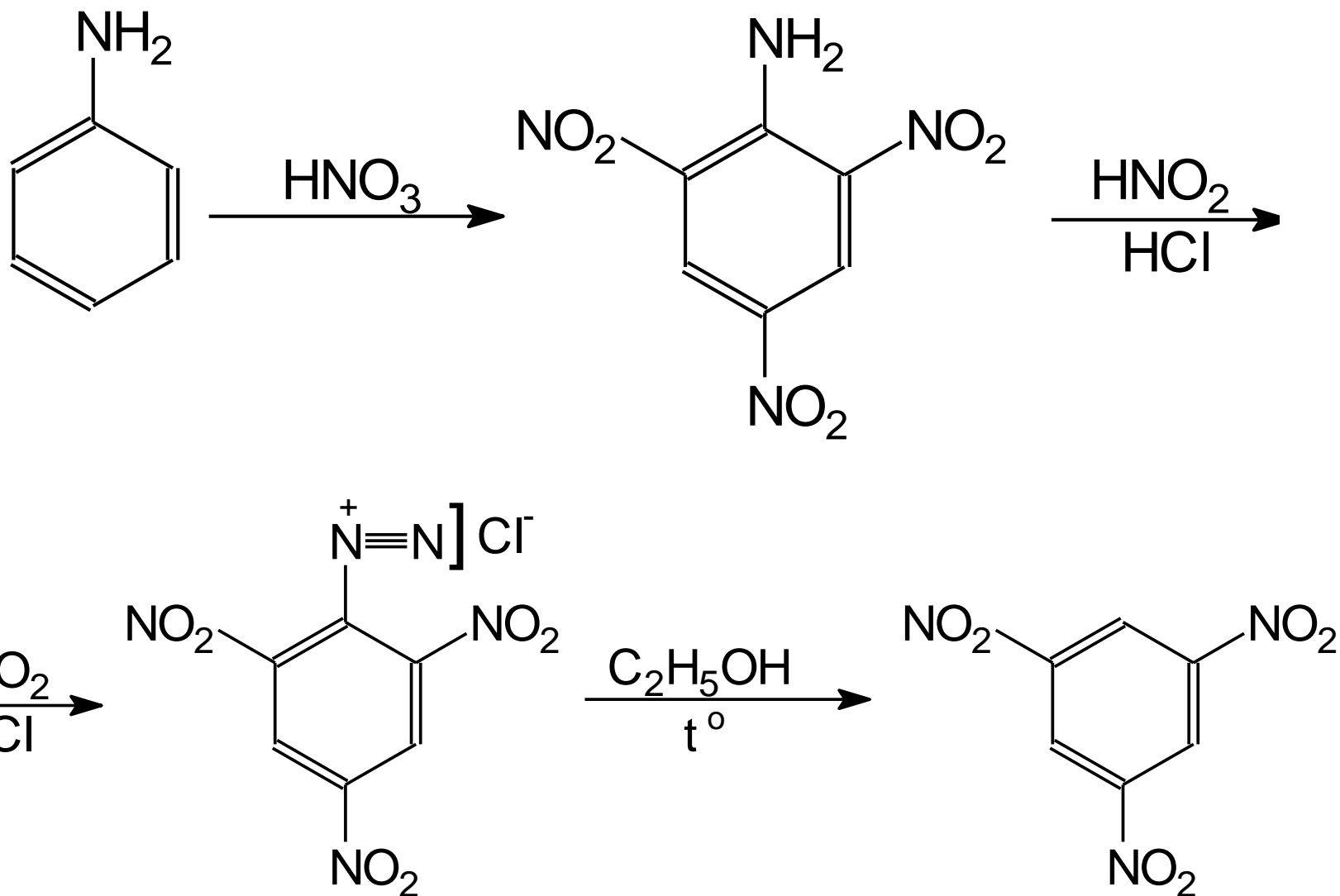


2. Substituția diazogrupei cu atomul de iod.



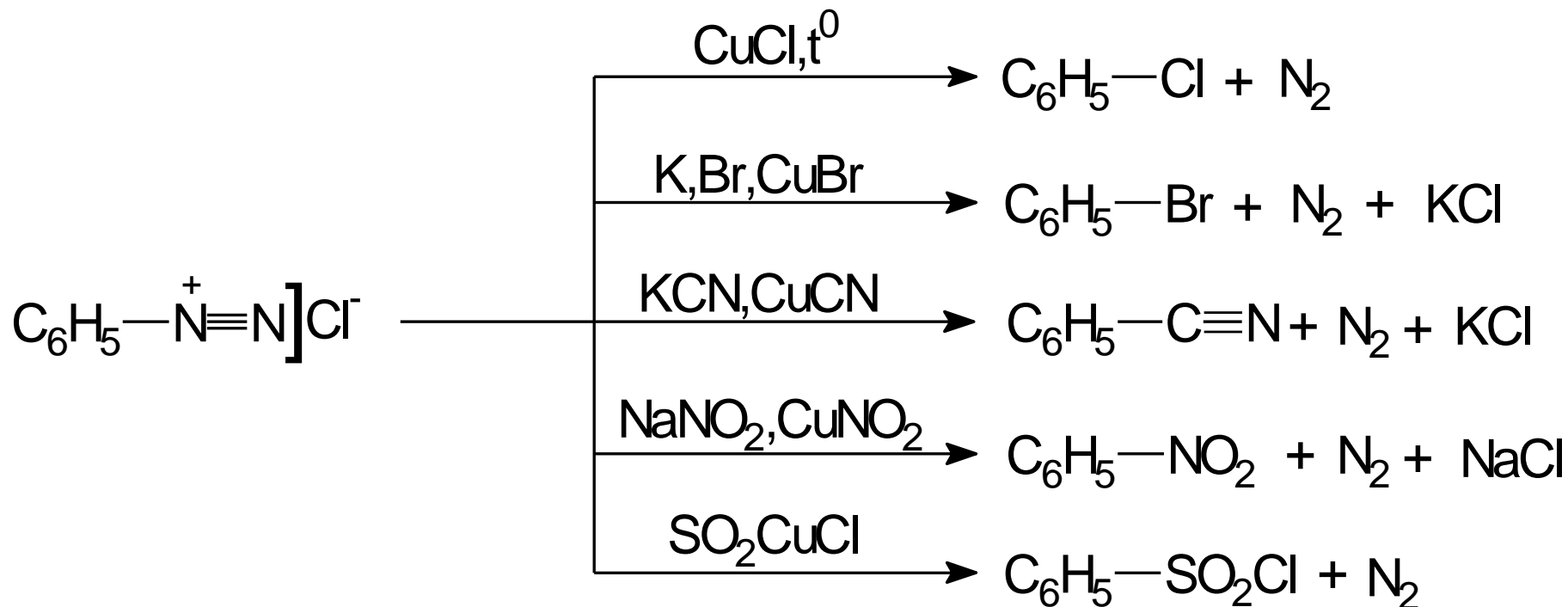
3. Substituția diazogrupei cu atomul de hidrogen.





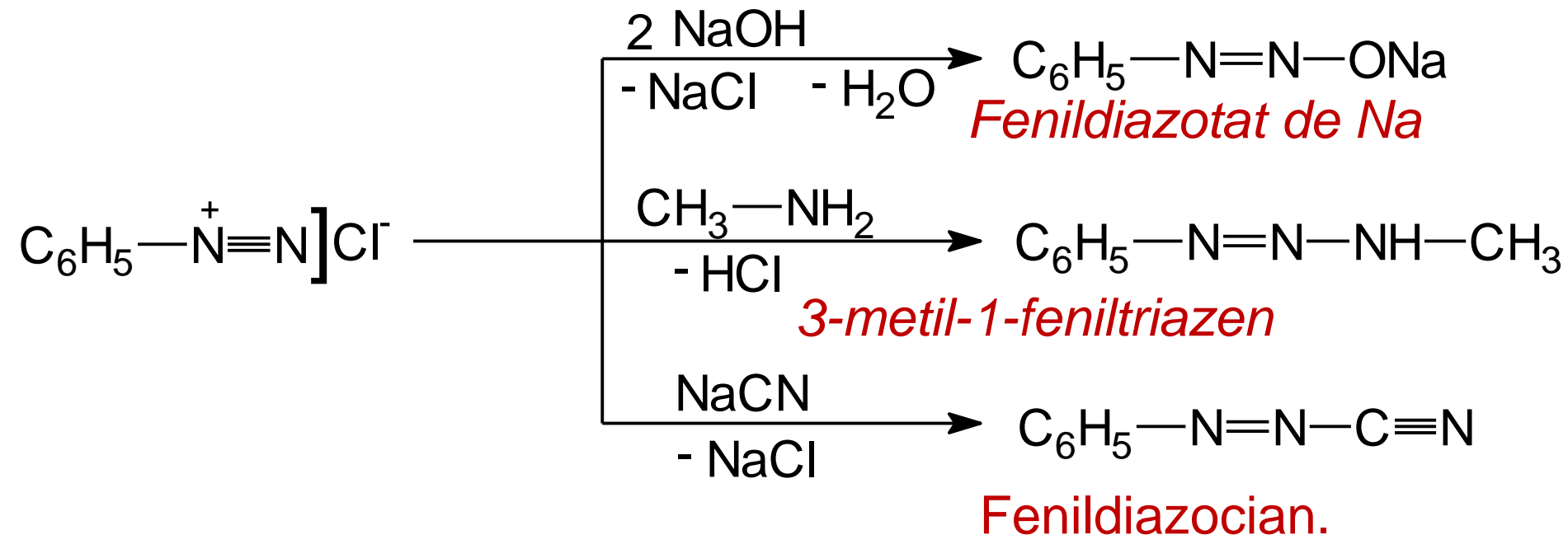
4. Substituția diazogrupei catalizată cu sărurile de Cu(I)

(reacția Zandmeier)



B. Reacțiile sărurilor de diazoniu fără eliminare de azot.

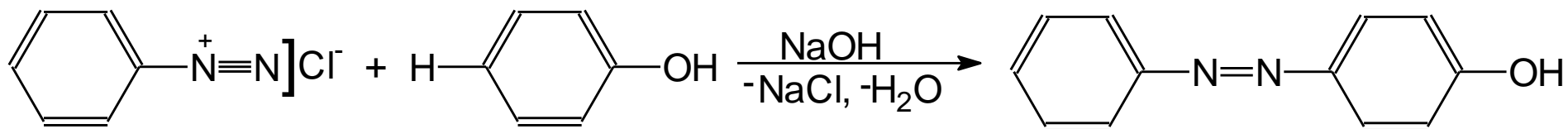
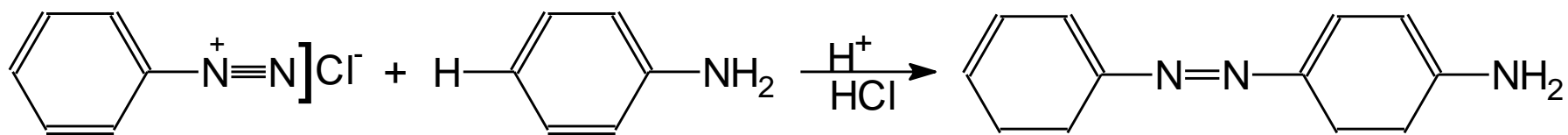
1. Formarea diazoderivaților.

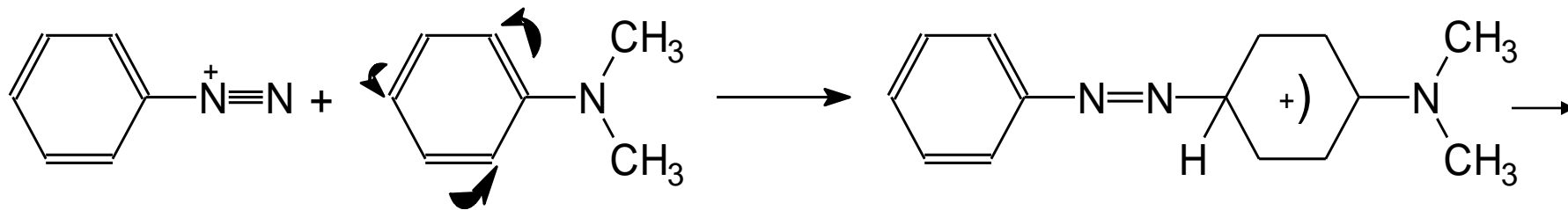


2. Reducerea sărurilor de diazoniu.



3. Reacții de azocombinare (de cuplare).

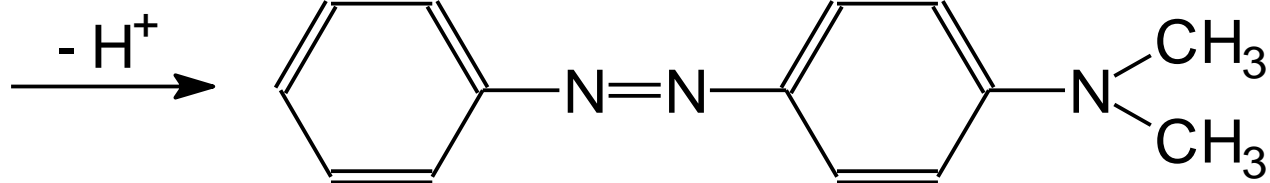




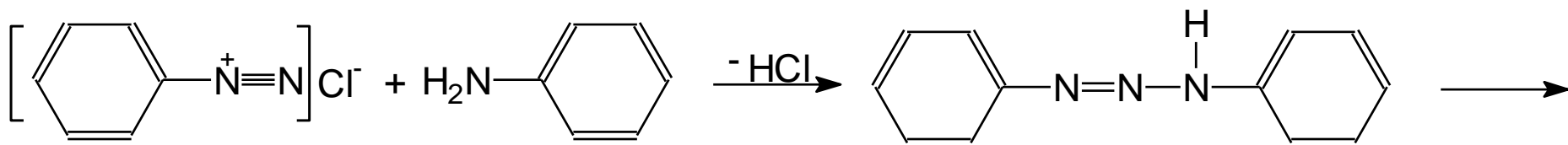
Diazocomponentul

Azocomponentul

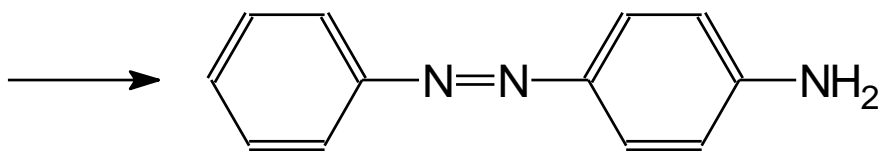
complexul σ



4-Dimetilaminoazobenzen



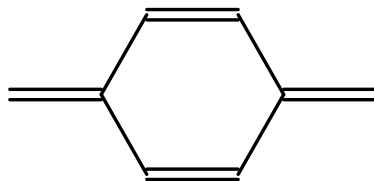
Diazoaminobenzen



4-Aminoazobenzen.

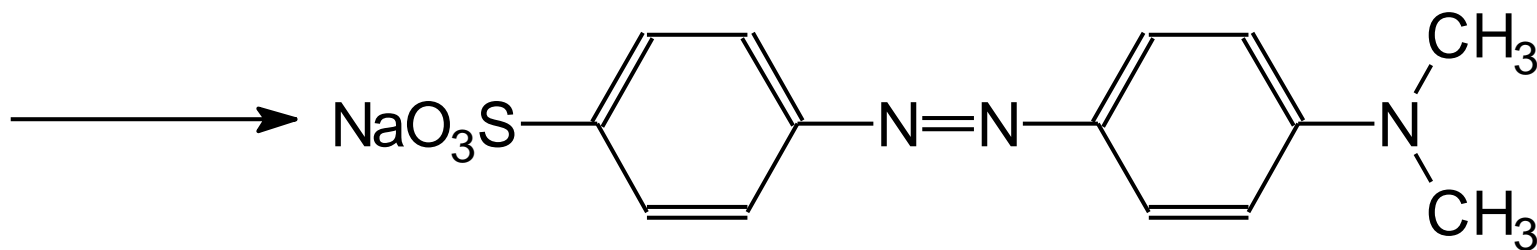
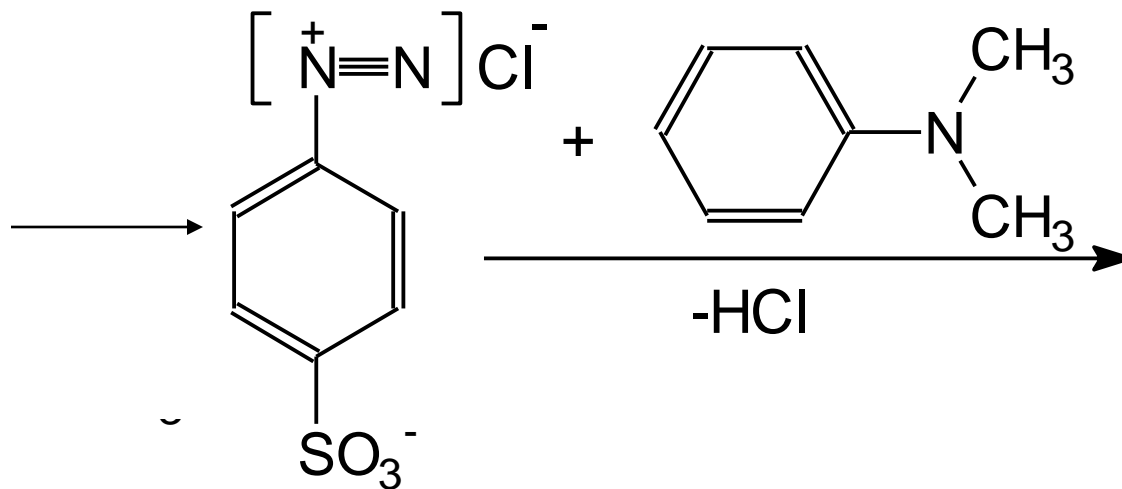
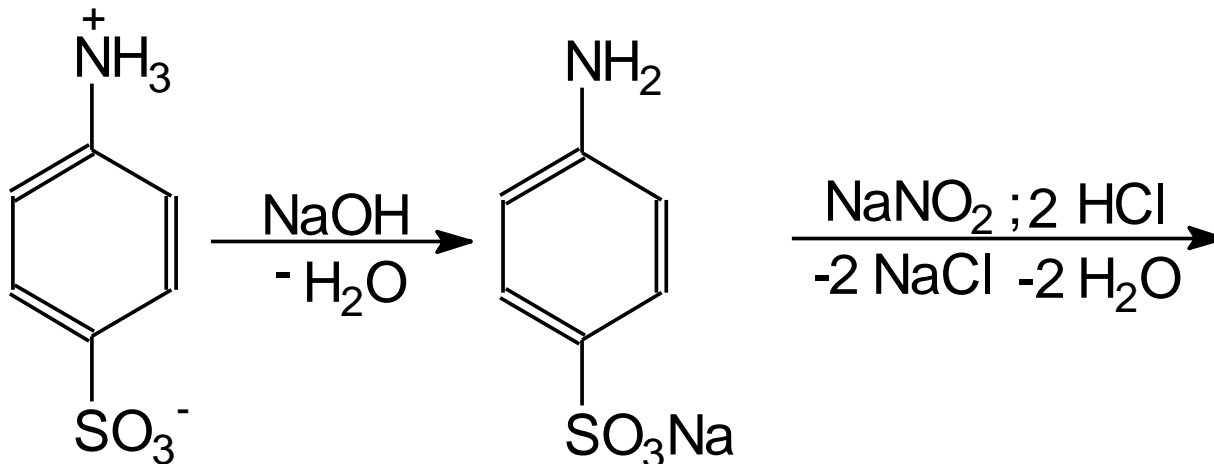
Azogrupa $-\text{N}=\text{N}-$,

Grupa chinoidă



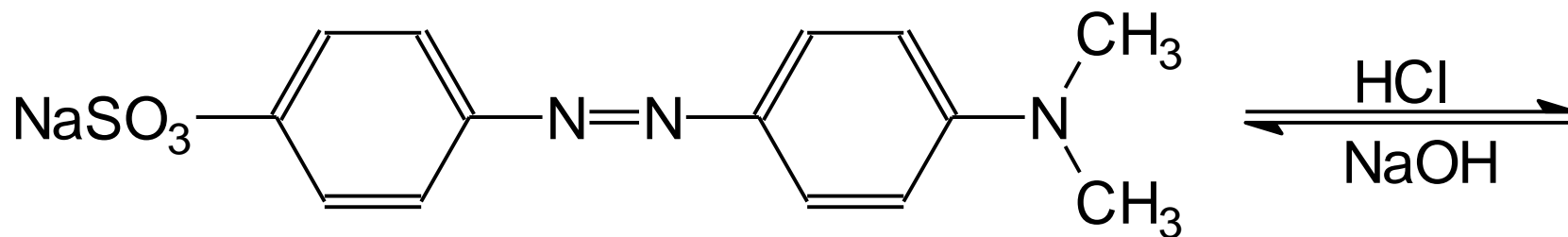
+M efect:

$-\text{OH}$, NH_2 , NHR , NR_2 , OR ș.a.

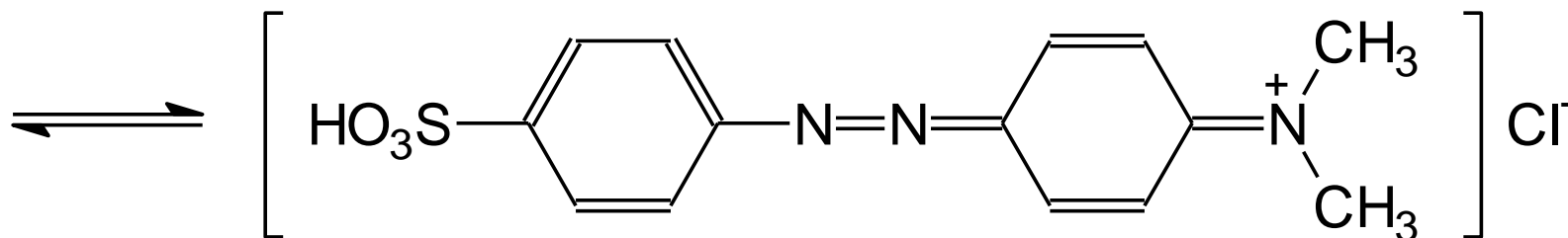


Metiloranj

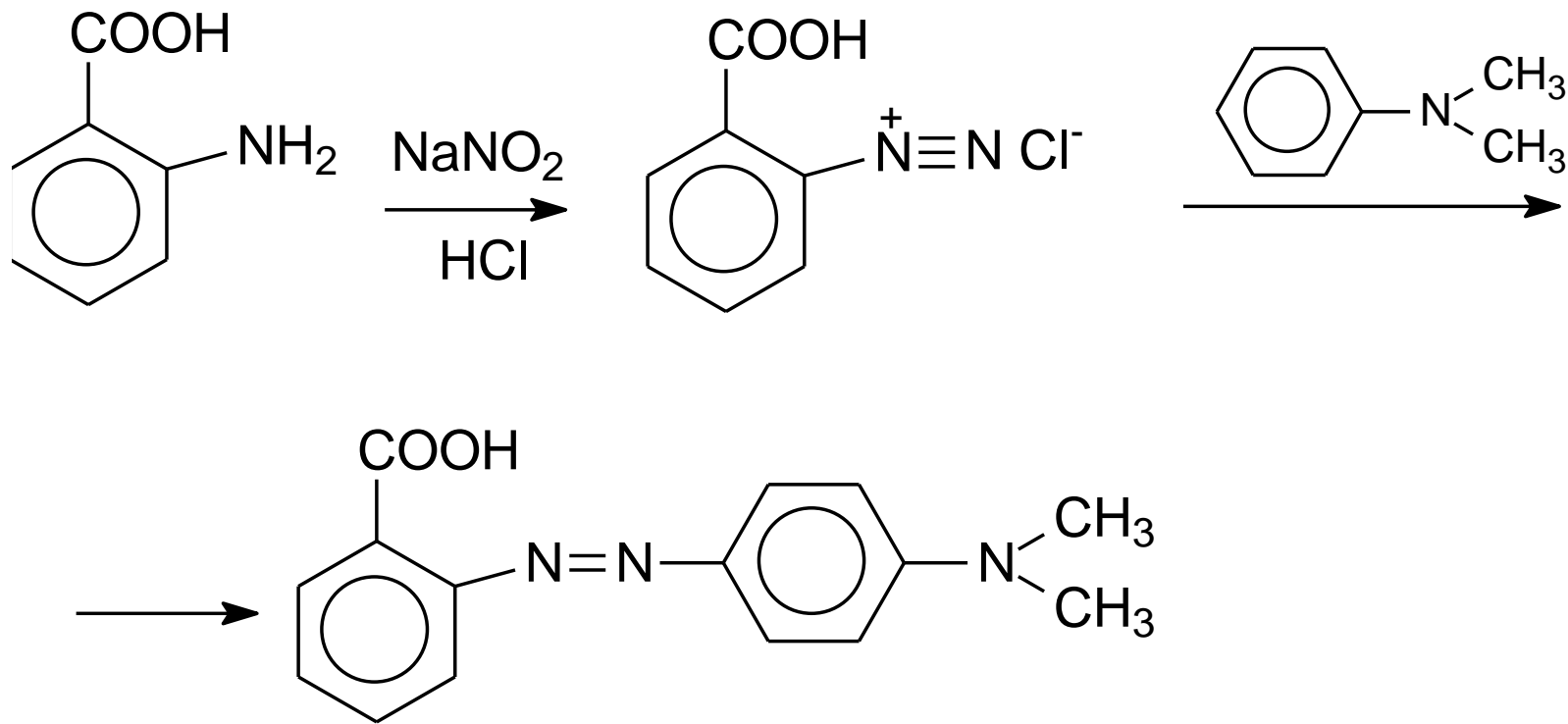
Metiloranj



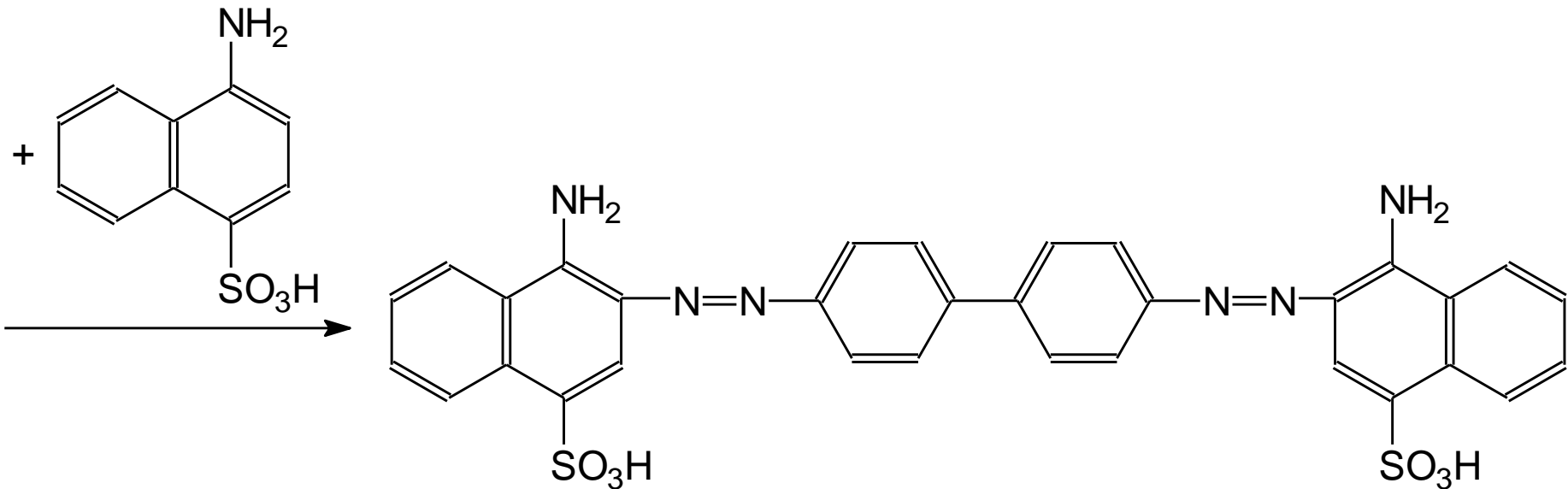
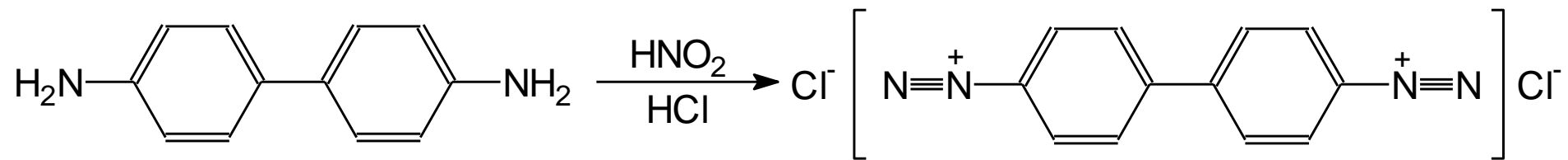
Mediu bazic și neutru - galben



Mediu acid - roșu



Roșu de metil



Roșu de Congo

β -Naftoloranj.

