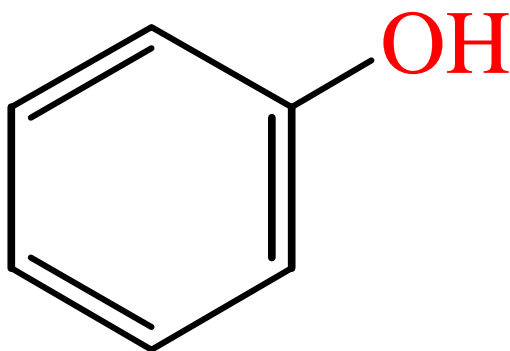


Alcoli, Fenoli, Eteri



Etanolo

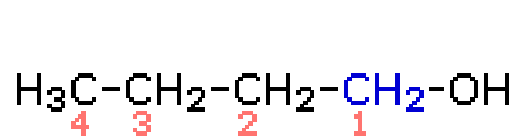


Fenolo

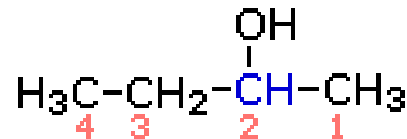


Dimetil etere

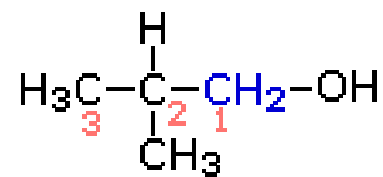
Nomenclatura degli Alcoli



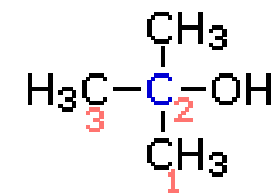
1-butanol
(butyl alcohol)
a 1°-alcohol



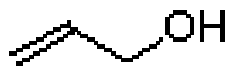
2-butanol
(*sec*-butyl alcohol)
a 2°-alcohol



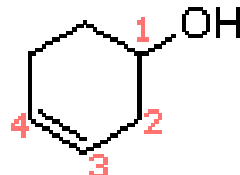
2-methyl-1-propanol
(*isobutyl* alcohol)
a 1°-alcohol



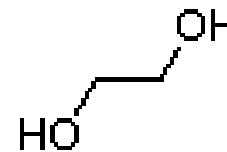
2-methyl-2-propanol
(*tert*-butyl alcohol)
a 3°-alcohol



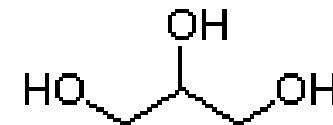
2-propen-1-ol
(allyl alcohol)



3-cyclohexen-1-ol

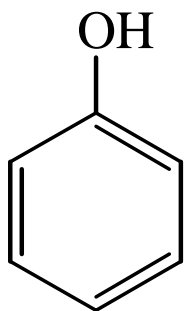


1,2-ethanediol
(ethylene glycol)

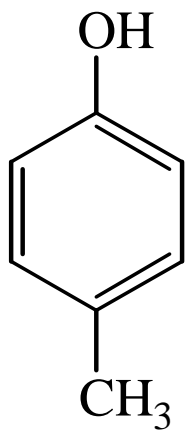


1,2,3-propanetriol
(glycerol)

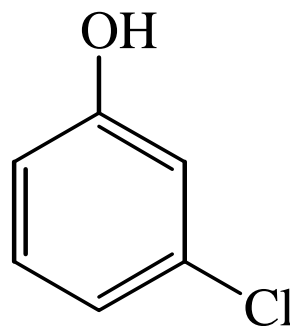
Nomenclatura dei Fenoli



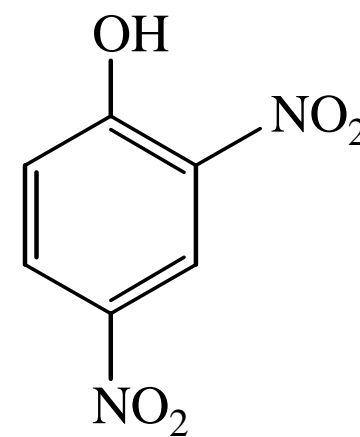
Fenolo



p-Metil Fenolo

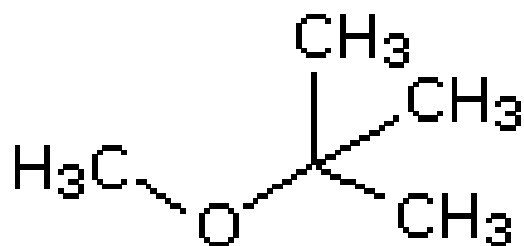


m-Cloro Fenolo

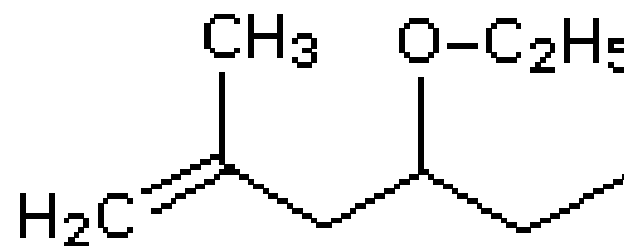


2,4-Dinitro Fenolo

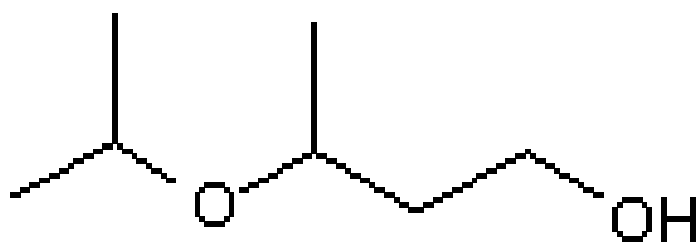
Nomenclatura degli Eteri



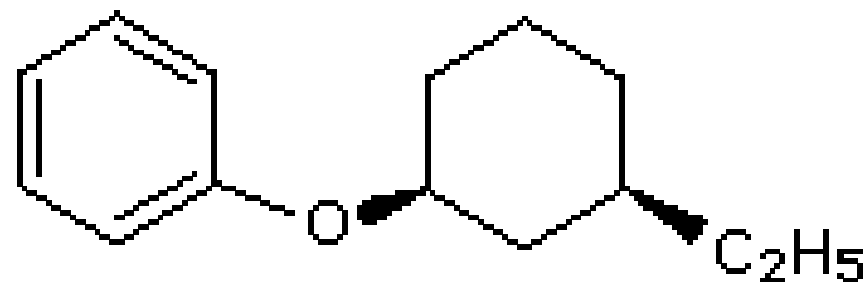
2-methoxy-2-methylpropane
tert-butyl methyl ether



4-ethoxy-2-methyl-1-hexene



3-isopropoxy-1-butanol

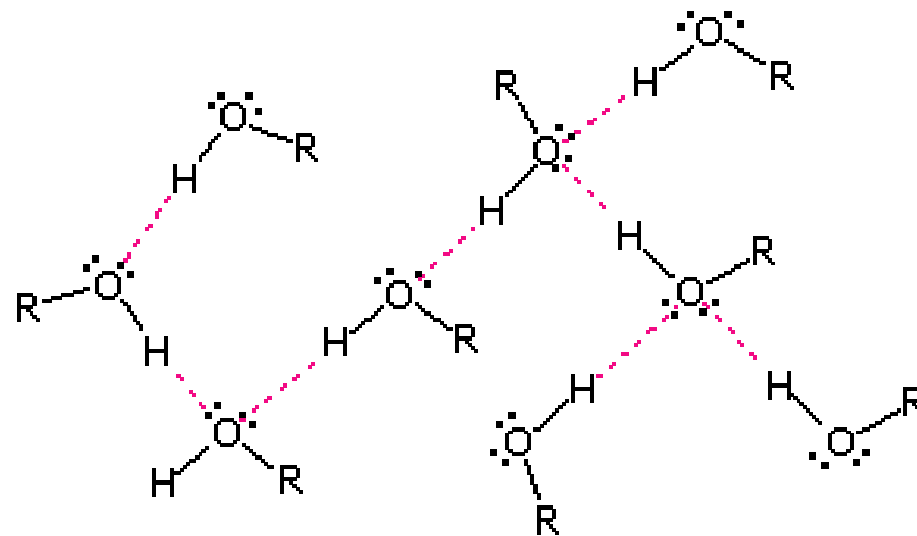


cis-1-ethyl-3-phenoxy-cyclohexane

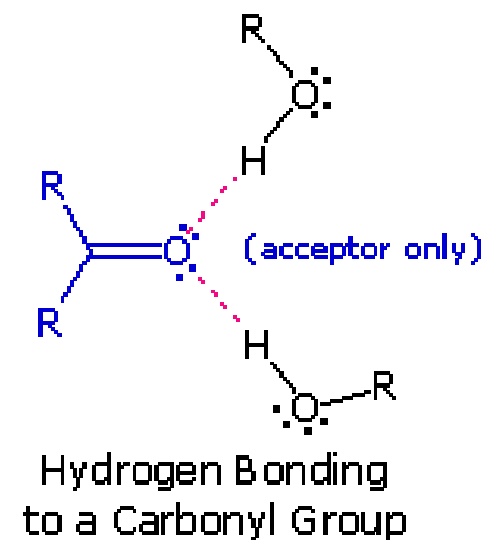
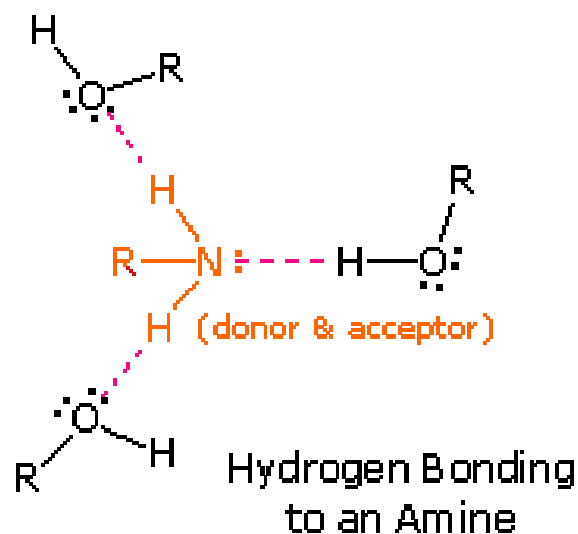
Nomenclatura degli Eteri

Gruppo Alchilico	Nome		Gruppo Alcossi	Nome
CH_3-	Metil		$\text{CH}_3\text{O}-$	Metossi
CH_3CH_2-	Etil		$\text{CH}_3\text{CH}_2\text{O}-$	Etossi
$(\text{CH}_3)_2\text{CH}-$	Isopropil		$(\text{CH}_3)_2\text{CHO}-$	Isopropossi
$(\text{CH}_3)_3\text{C}-$	tert-Butil		$(\text{CH}_3)_3\text{CO}-$	terz-Butossi
C_6H_5-	Fenil		$\text{C}_6\text{H}_5\text{O}-$	Fenossi

Legami ad Idrogeno Interessanti il Gruppo Alcolico



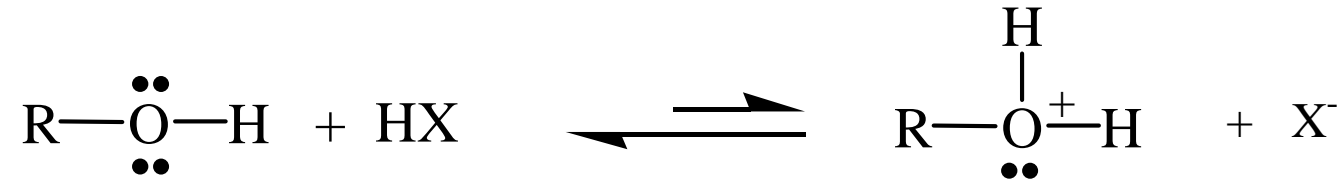
Hydrogen Bonding
in Alcohols and
Water (R=H)



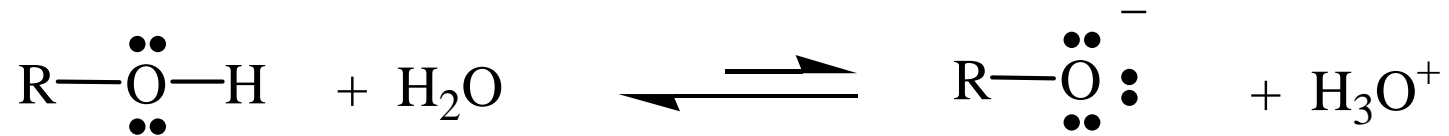
Punti di Ebollizione di Alcoli ed Eteri

Composto	Formula	Peso Mol.	Punto Eb.
dimetil etere	CH_3OCH_3	46	-24 °C
etanolo	$\text{CH}_3\text{CH}_2\text{OH}$	46	78 °C
propanolo	$\text{CH}_3(\text{CH}_2)_2\text{OH}$	60	98 °C
dietil etere	$(\text{CH}_3\text{CH}_2)_2\text{O}$	74	34 °C
glicole etilenico	$\text{HOCH}_2\text{CH}_2\text{OH}$	62	197 °C
acido acetico	$\text{CH}_3\text{CO}_2\text{H}$	60	118 °C
etilenediammina	$\text{H}_2\text{NCH}_2\text{CH}_2\text{NH}_2$	60	118 °C

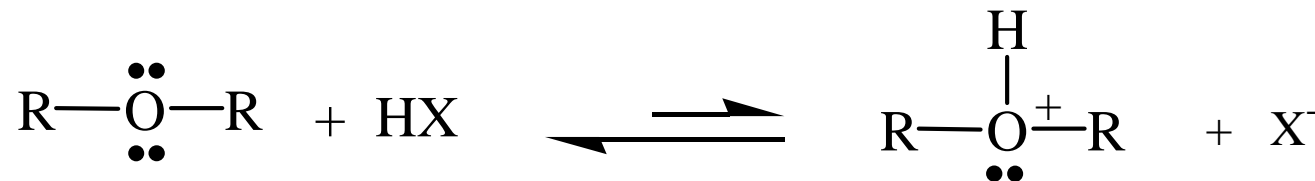
Proprietà Basiche ed Acide di Alcoli ed Eteri



pKa (ione ossonio) = da -2 a -5

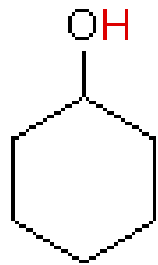


pKa = da 16 a 18

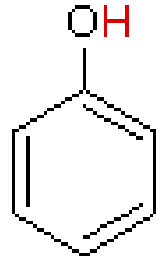


pKa (ione ossonio) = da -2 a -5

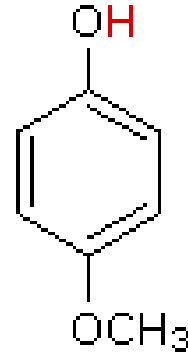
Acidità di vari Fenoli



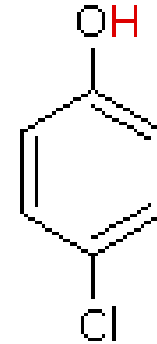
pK_a 16



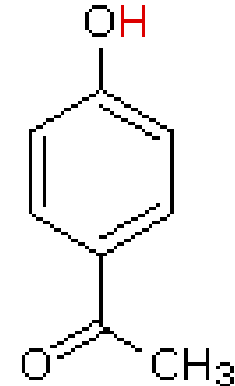
10.0



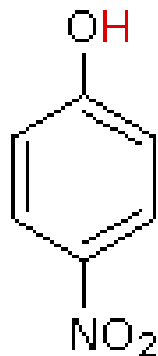
10.2



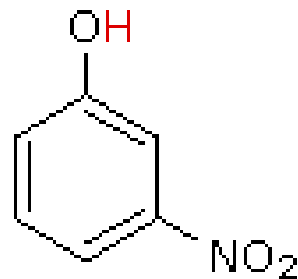
9.2



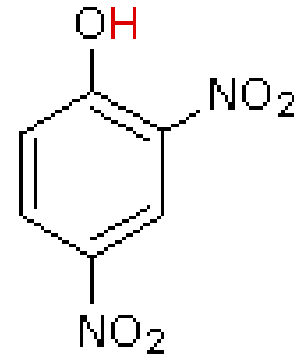
7.7



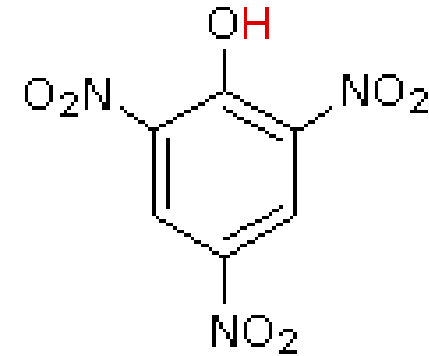
pK_a 7.2



8.3

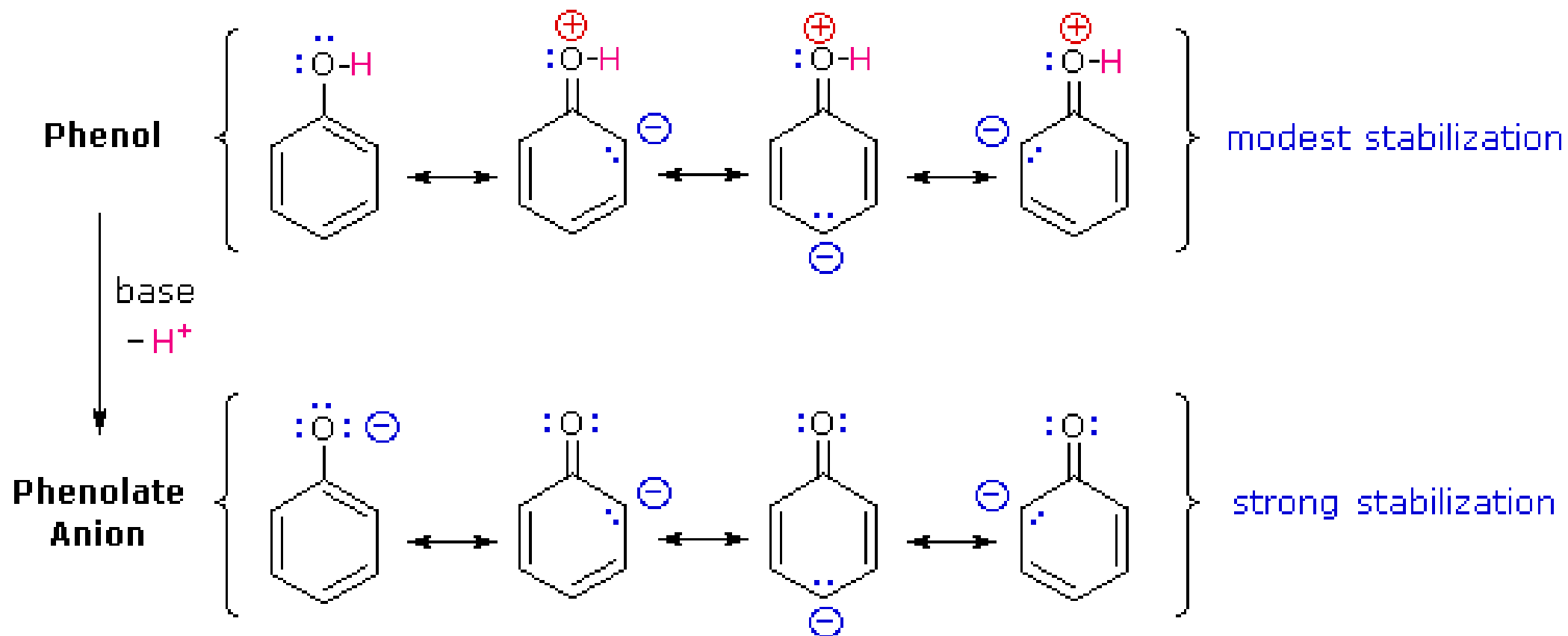


4.1

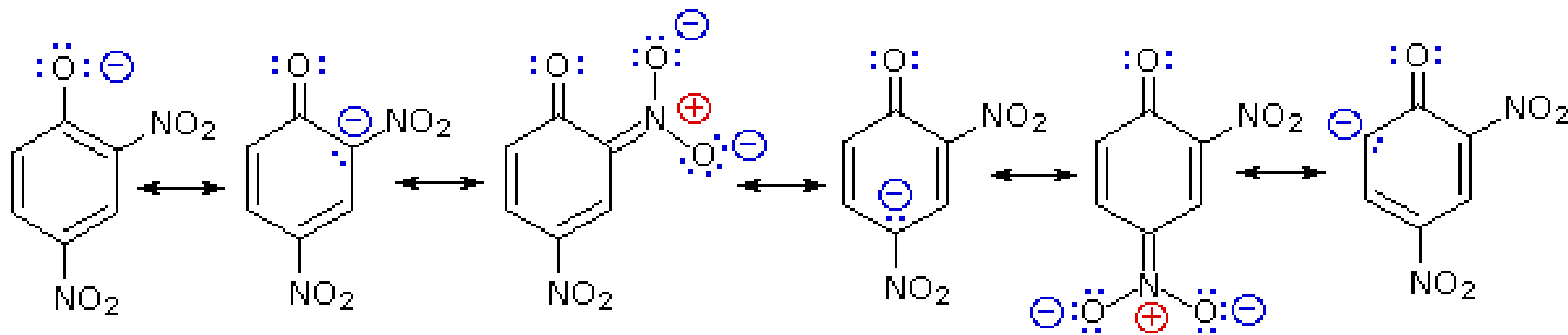


0.3

Razionalizzazione della Maggiore Acidità dei Fenoli Rispetto agli Alcoli



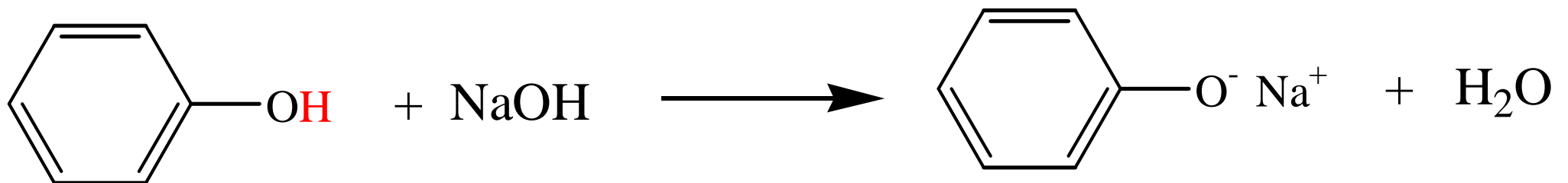
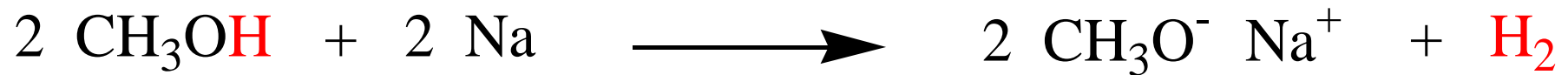
Razionalizzazione della Forte Acidità dei Nitro Fenoli orto e para Sostituiti



Resonance Stabilization of Phenolate by *ortho* and *para* Nitro Substituents

Le Reazioni degli Alcoli e dei Fenoli

Formazioni dei sali (Alcolati e Fenati)

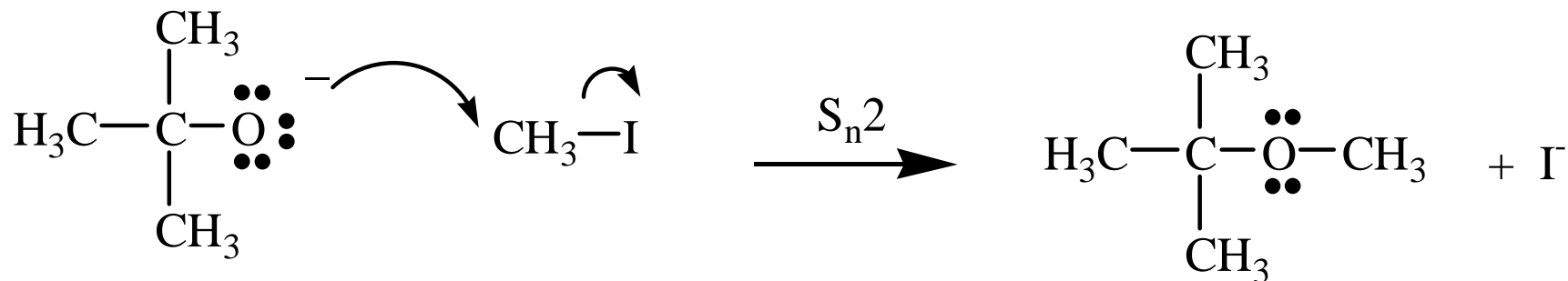


Le Reazioni degli Alcoli: la Sintesi di Williamson degli Eteri

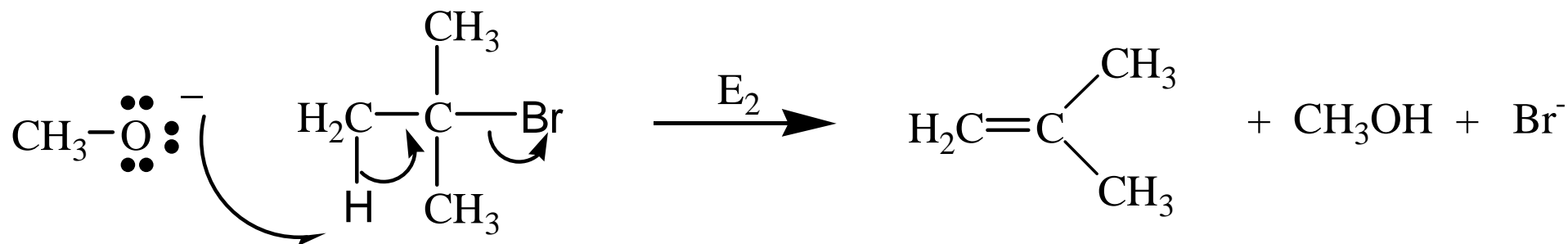


Terz. Butanolo
1,1'-Dimetiletanolo

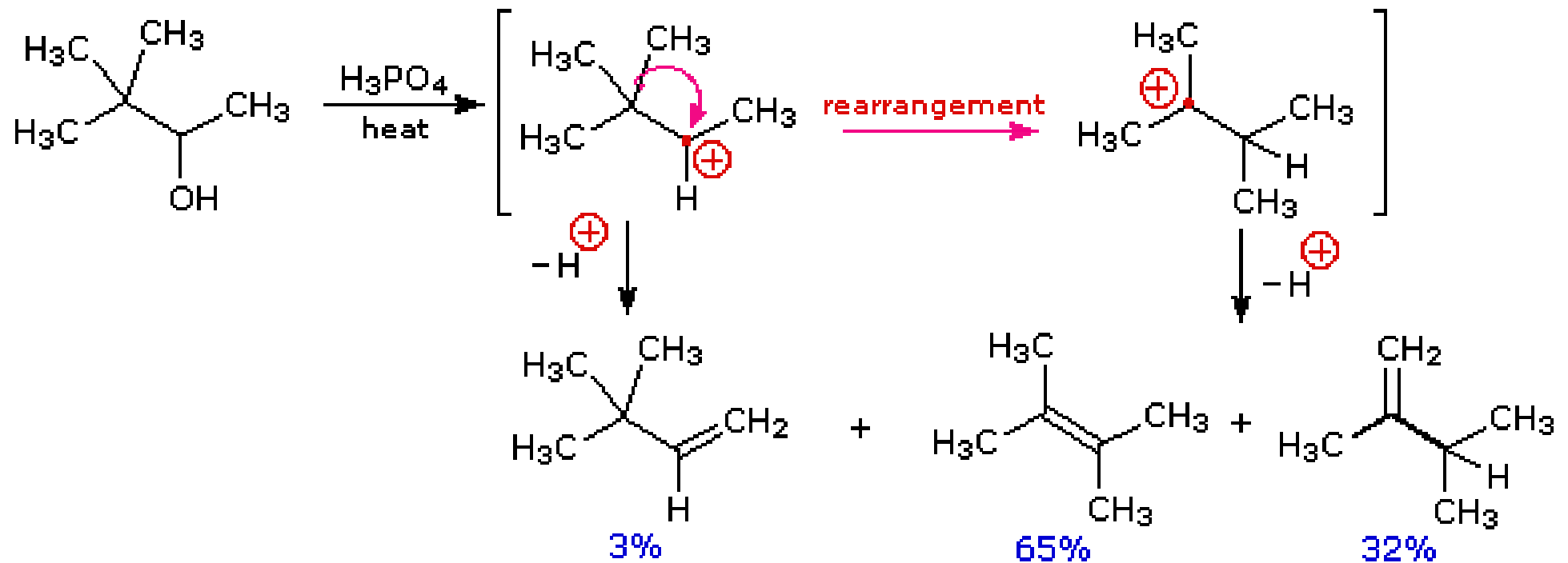
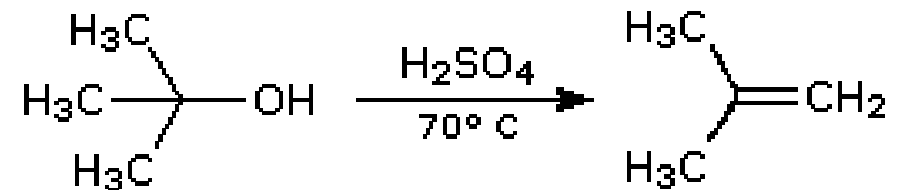
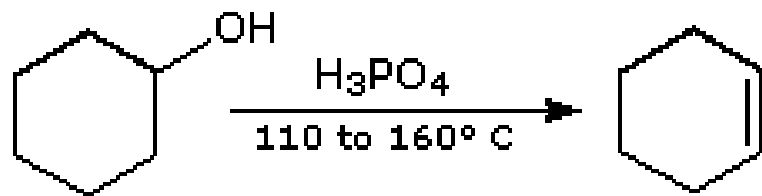
Terbutilato di Potassio
Terbutossido di Potassio



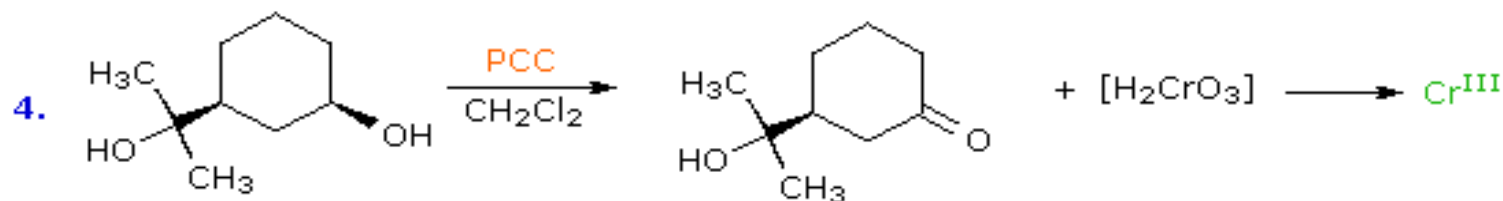
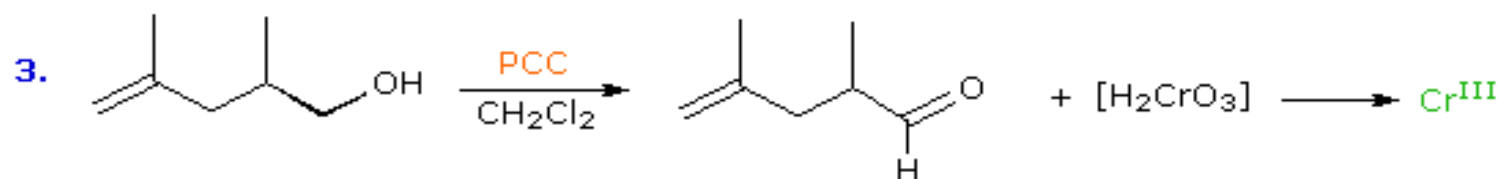
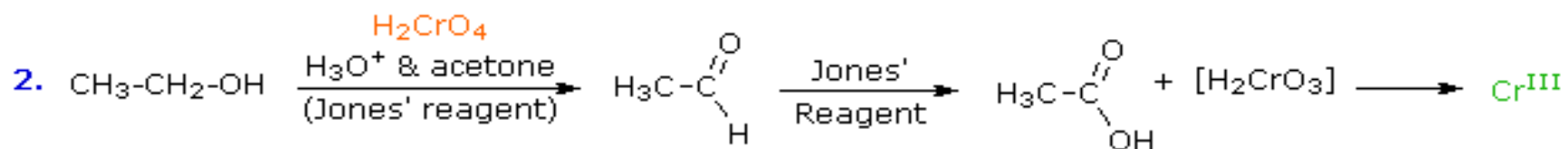
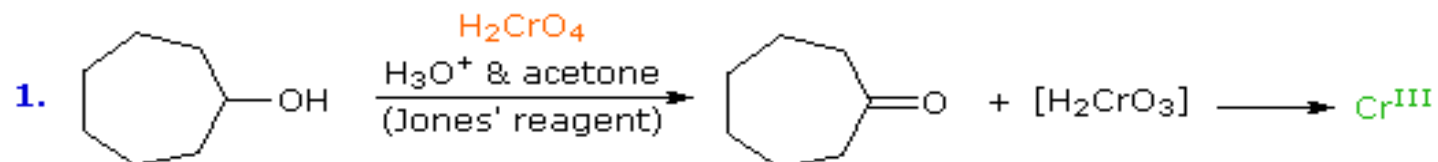
Metilterbutilene



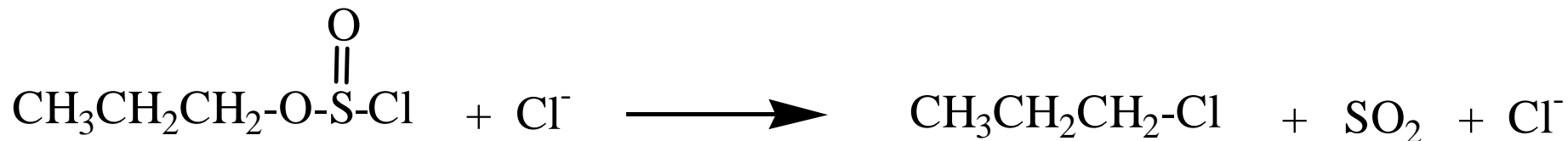
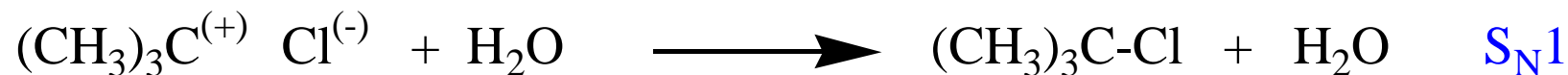
Le Reazioni degli Alcoli: la Disidratazione



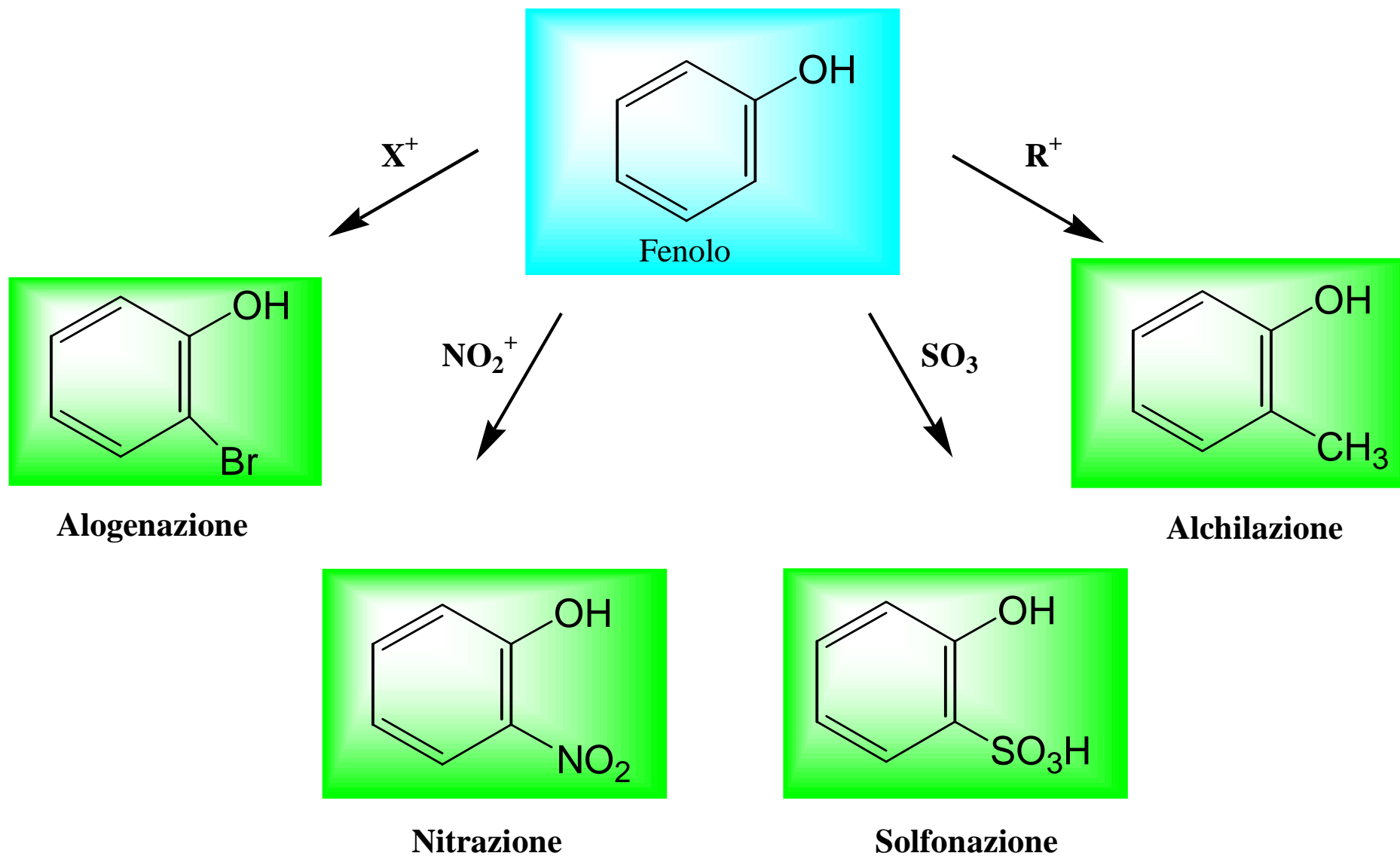
Le Reazioni degli Alcoli: L'Ossidazione a Composti Carbonilici



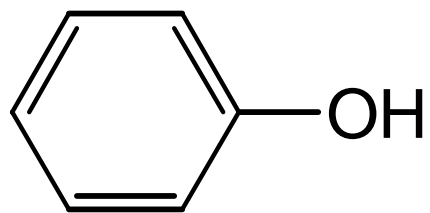
Le Reazioni degli Alcoli: Trasformazione in Alogenuri Alchilici



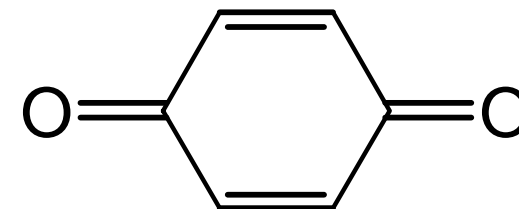
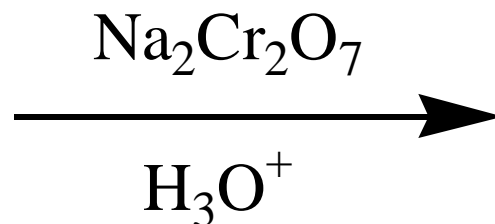
Le Reazioni dei Fenoli: La Sostituzione Elettrofila Aromatica



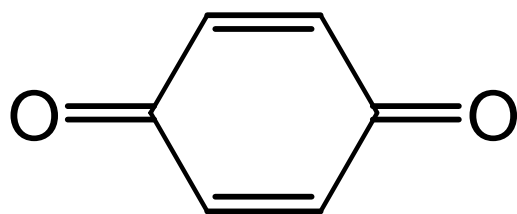
L' Ossidazione dei Fenoli a Chinoni



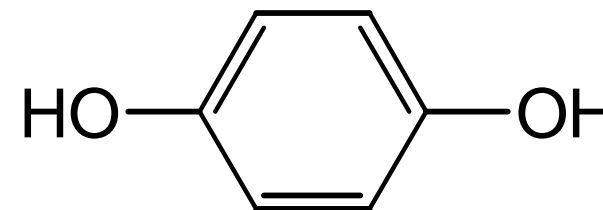
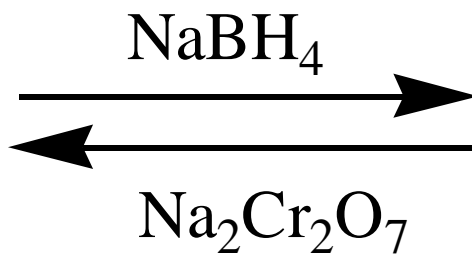
Fenolo



Benzochinone

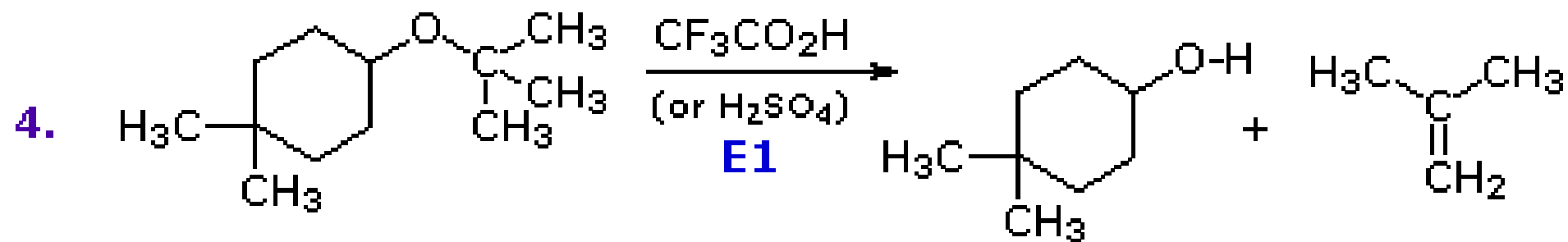
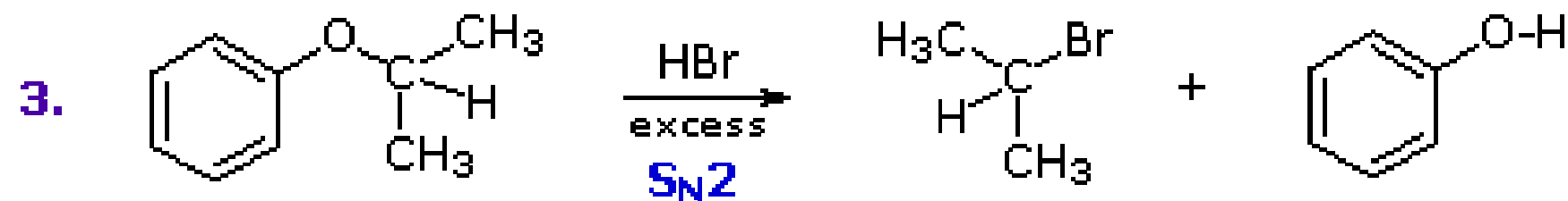
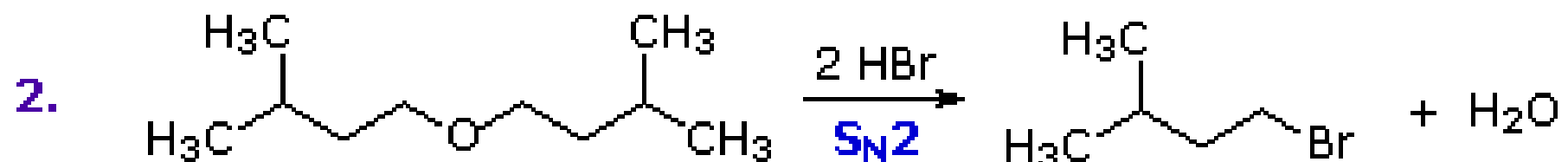
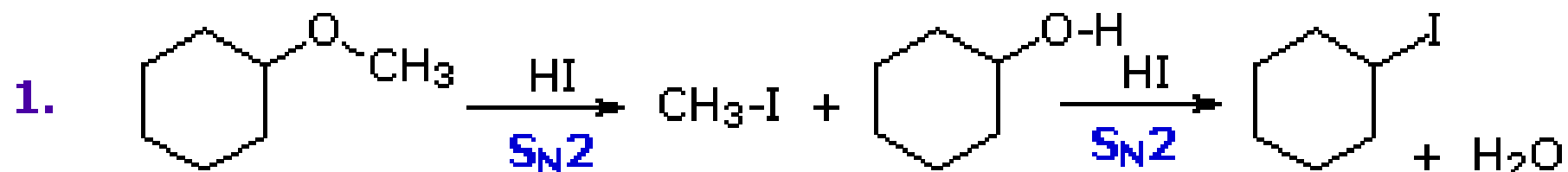


Benzochinone

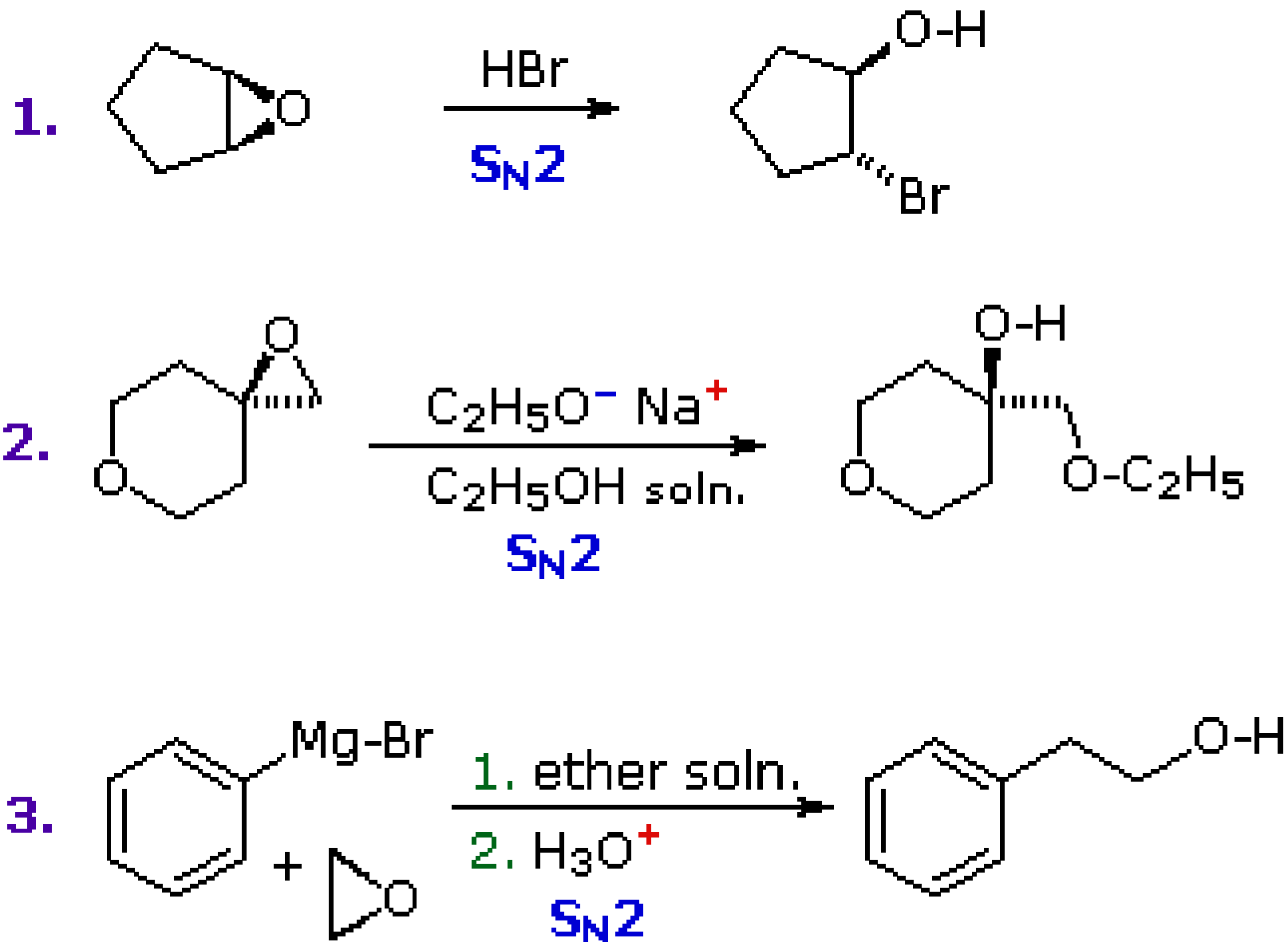


Idrochinone

Le Reazioni degli Eteri: la Scissione Acida



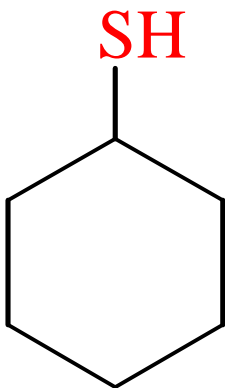
Le Reazioni degli Epossidi: Reazioni di Apertura dell'Anello



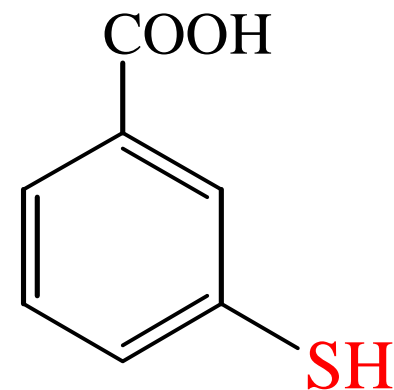
Nomenclatura dei Tioli e dei Solfuri



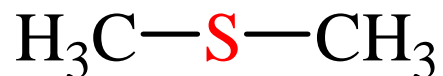
Etantiolo



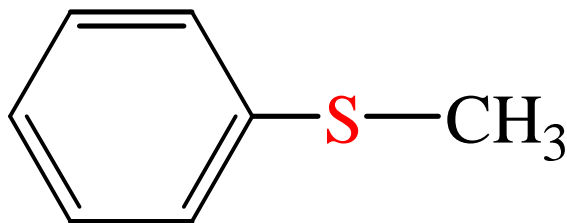
Cicloesantiolo



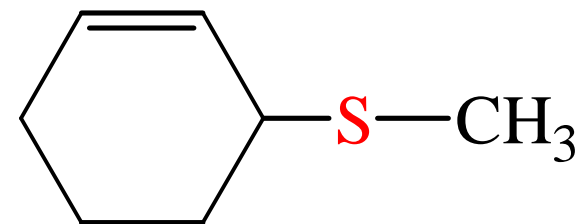
Acido m-mercaptobenzoico



Dimetil solfuro



Fenil metil solfuro



3-(Metiltio) cicloesene