

ORGANIC CHEMISTRY

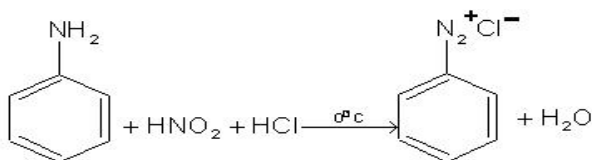
TOPIC: 7

Diazonium salts – Preparation, synthetic applications and uses.

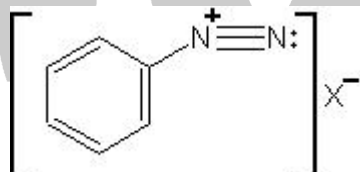
DIAZONIUM SALT:

I. Preparation of Diazonium salt:

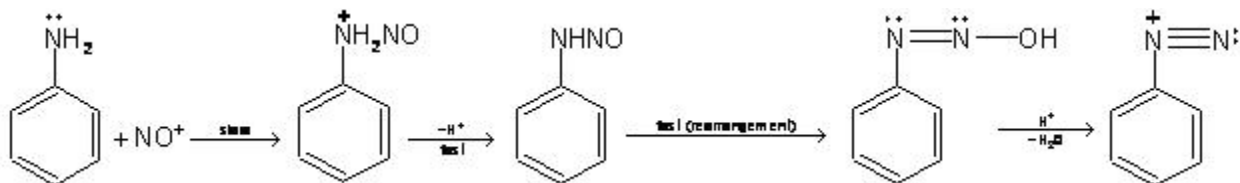
When primary aromatic amine is treated with nitrous acid in a cool solution, product is unstable compound, known as diazonium salt.



This reaction is known as diazotisation. Diazonium salts have the structure



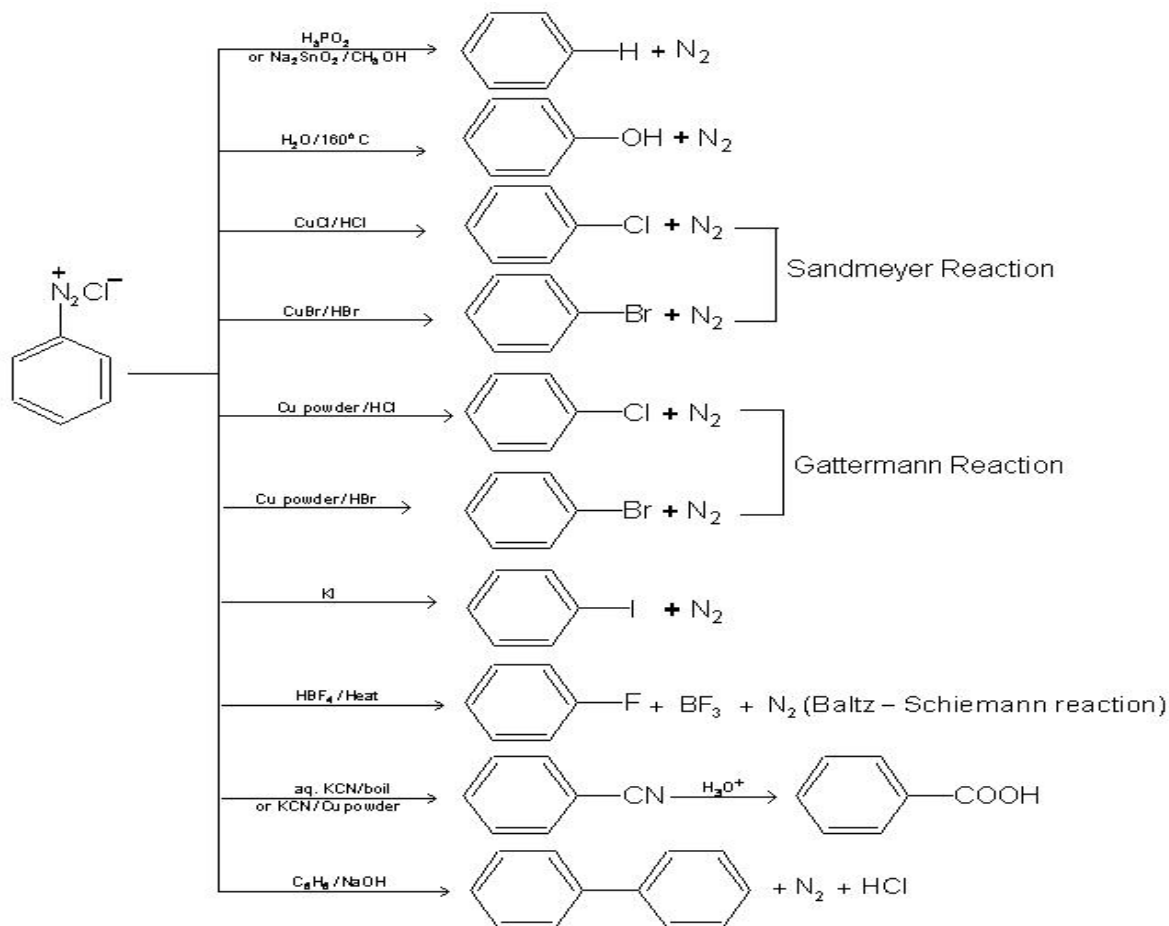
Mechanism of diazotisation:



II. Reactions of diazonium salts:

These salts give substitution reactions and coupling reactions as follows:

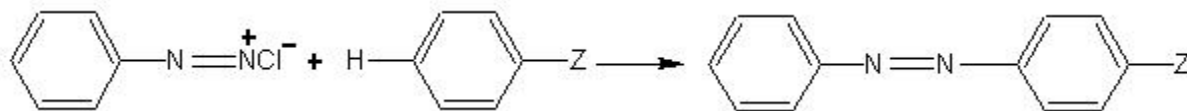
1. Substitution reactions:



2. COUPLING REACTIONS:

Coupling reactions are electrophilic substitution reactions. Some examples are as follows:

General reaction



Examples:

