

# General Concepts of Hybridisation

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## CLASSIFICATION OF REAGENTS

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\* Organic reagents fall into two main groups:

1] Electrophiles or Electrophilic Reagents

2] Nucleophiles or Nucleophilic Reagents

### Electrophiles

Electro :- Electron

Phile :- Lover

\* A reagent which can accept an electron pair in a reaction is called an electrophile.

\* The name electrophile means "electron-loving" and indicates that it attacks regions of high electron density (negative centres) in the reactant molecules.

- \* Electrophiles are electron-deficient.
- \* They may be positive ions (including carbonium ions) or neutral molecules with electron deficient centres.
- \* An electrophile can be represented by the general symbol  $e^+$ .

## Nucleophiles

Nucleo = Nucleus

Phile = Lover

- \* A reagent which can donate an electron pair in a reaction is called a nucleophile.
- \* The name nucleophile means "nucleus loving" and indicates that it attacks regions of low electron density (positive centre) in the reactant molecules.
- \* Nucleophile are electron-rich.
- \* They may be negative ion (including carbanions) or neutral molecules with free electron pairs.
- \* A nucleophile can be represented by a general symbol  $Nu^-$ . **Completed**