

Intermediate species in organic reaction

Organic chemical reactions happen through

HOMOLYTIC CLEAVAGE:

Non-polar bond break up symmetrically. Energized by Sunlight @UV to produce Free radical

Free radical

Unpaired electron at the species

HETEROLYTIC CLEAVAGE

Polar bond break-up unsymmetrically to produce Nucleophile and electrophile. Normally involves high temperature, Pressure and Catalyst

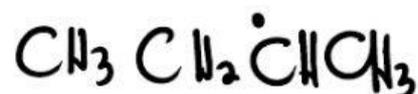
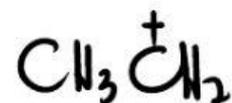
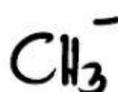
Nucleophile

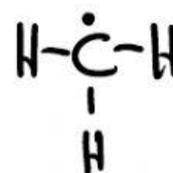
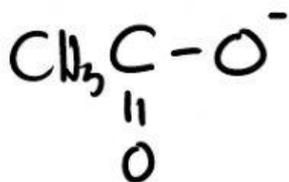
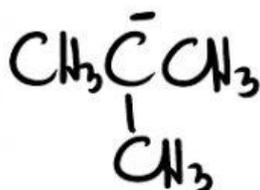
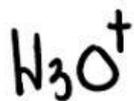
Electron rich species @ alkenes @ Negative ion

Electrophile

Electron deficient species @ Positive ion

Classify the intermediate species as free radical, Nucleophile or Electrophile

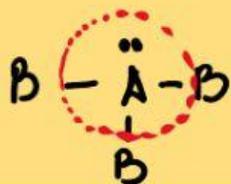




Nucleophile.

All Lewis bases.

It is electron rich species, octet and poses lone pair of e



Electrophile

All Lewis acids. It is electron deficient species, not octet and poses 6 e only



Classify the compound as nucleophile or electrophile

