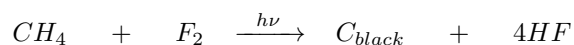
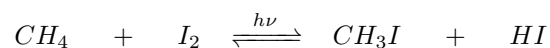


1 Fluorination



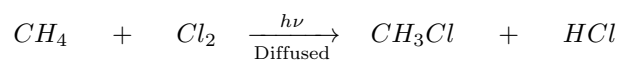
F is highly reactive, hence the reaction is exothermic.

2 Iodination



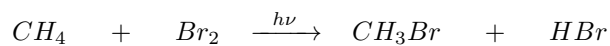
As the reaction is reversible, an oxidizing agent such as HIO_3 , HNO_3 , etc. is used.

3 Chlorination



- Cl is more reactive, hence being less selective.
- Reactivity ratio $1^\circ : 2^\circ : 3^\circ :: 1 : 3.8 : 4.5$

4 Bromination



- Br being less reactive, hence more selective.
- Reactivity ratio $1^\circ : 2^\circ : 3^\circ :: 1 : 80 : 1600$