

Organic reactions

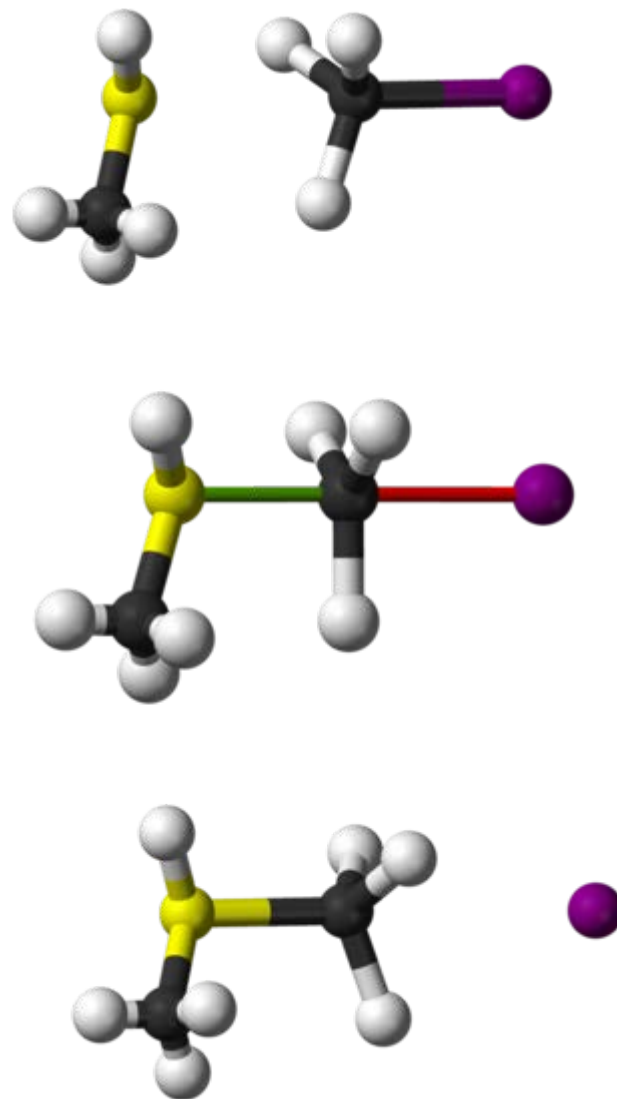
Organic reaction mechanisms have been studied extensively in order to develop predictive power for chemical synthesis.

Nucleophilic substitutions involve an attacking group (called the nucleophile) binds to carbon while another group (called the leaving group) is displaced.

There are two main types:

S_N1 = first order because leaving group leaves first

S_N2 = second order because nucleophile attacks first



S_N2 reaction

Depends on concentration of both nucleophile and substrate.

Shown here is an attack on CH_3Br to make an ether.

Rate law

$$v = k[\text{CH}_3\text{OH}][\text{CH}_3\text{Br}]$$

