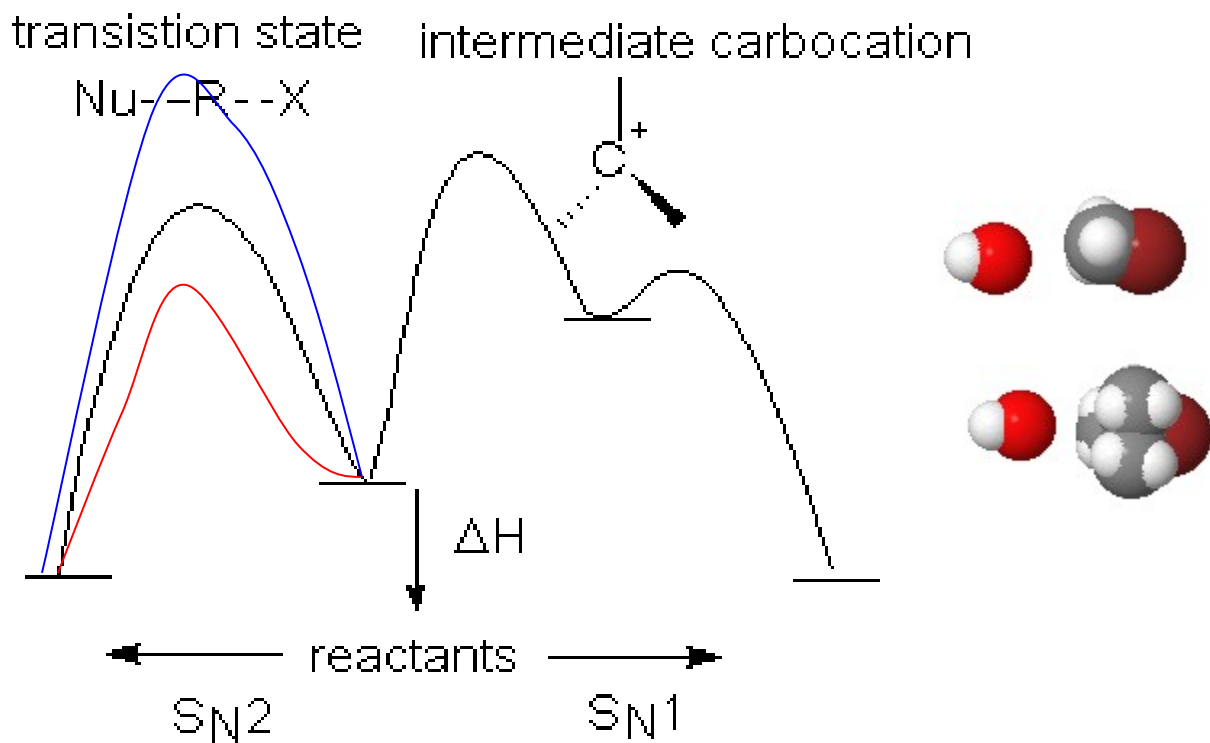


# $S_N1$ or $S_N2$



$S_N2$  transition state

$1^\circ$  R - X    yes

$2^\circ$  R - X    ?

$3^\circ$  R - X    no