

Answer on Question#74572 – Chemistry – Organic chemistry

Question:

Among alkyl halides, order of reactivity of SN2 reaction is



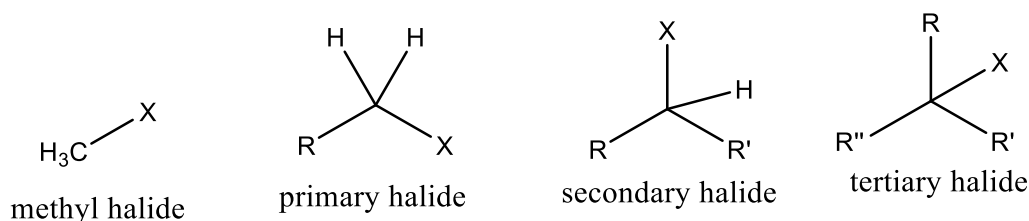
Discuss the factors which are mainly responsible for this order.

Answer:

The order of reactivity of SN2 reaction is

methyl halide > primary alkyl halide > secondary alkyl halide > tertiary alkyl halide

because of **steric effect**.



Each R group increases van der Waals repulsions in transition state between a nucleophile and substrate that increases energy of the transition state and decreases rate of reaction.

