

20. Why do alkenes prefer to undergo electrophilic addition reaction while arenes prefer electrophilic substitution reaction? Explain.

Sol: Due to the presence of a π -electron cloud above and below the plane of alkenes and arenes, these are electron rich molecules and, therefore, provide sites for the attack of electrophiles. Hence, they undergo electrophilic reactions. Alkenes undergo electrophilic addition reactions because they are unsaturated molecules.