

Question. Assertion (A): The enthalpy of reaction remains constant in the presence of a catalyst.

Reason(R) : A catalyst participating in the reaction, forms different activated complex and lowers down the activation energy but the difference in energy of reactant and product remains the same.

Solution: (A) is true. (R) is true and (R) is correct explanation of (A).

Enthalpy of reaction= Activation Energy of forward reaction – Activation Energy of reverse reaction.

Catalyst does not alter heat of reaction because it affects activation energy of forward and reverse reactions equally