QUESTION

Activation energy of a chemical reaction can be determined by:

- A evaluating rate constants at two different temperature
- B evaluating velocities of reaction at standard temperature
- C evaluating rate constant at standard temperature
- D changing concentration of reactants

ANSWER:

Correct option is A)

Activation energy of a chemical reaction can be determined by evaluating rate constants at two different temperature. It can be determined with the help of Arrhenius equation:

$$2.303\log \frac{K_2}{K_1} = \frac{E_4}{R} \left[\frac{T_2 - T_1}{T_1 T_2} \right]$$