LECTURE 34

1. A catalyst lowers an $E_{a,f}$ from 358 kJ mol^{-1} to 350. kJ mol^{-1} for a particular reaction. Determine the change (if any) in the:
    (a) ΔE for the reaction and
    (b) $E_{a,r}$ for the reaction.

2. (a) Draw a reaction coordinate diagram with "potential energy (P.E.)" on the Y-axis and "Reaction Coordinate ->" on the X-axis for an endothermic reaction.
    (b) Show as a solid line, the activation energy barrier for the uncatalyzed reaction, and show as a dashed line, the activation energy barrier for the catalyzed reaction.
    (c) Label the diagram with "products", "reactants," and "ΔE."

    <u>Additional Book Problems</u>:
    Atkins and Jones, Chemical Principles, fifth edition:
           Chapter 14.16, problem 14.95

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