

31. The speed of a homogeneous reaction is determined by the equation:

- A) $V = \pm \frac{1}{s} \frac{dn_A}{dt}$;
- B) $V = \pm \frac{1}{s} \frac{dc}{dn_A}$;
- C) $V = R \cdot F \cdot C$;
- D) $V = k \cdot C_A \cdot C_B$;
- E) $V = k(C_A - C_B)^n$.

32. The speed of a homogeneous reaction is determined by the equation:

- A) $V = \pm \frac{1}{s} \frac{dn_A}{dt}$;
- B) $V = \pm \frac{1}{\tau} \frac{dn_j}{dc}$;
- C) $V = \pm \frac{1}{s} \frac{dc}{dn_A}$;
- D) $V = R \cdot F \cdot C$;
- E) $V = k \cdot C^{n_{AA}} \cdot C^{n_{BB}}$.

33. Ways to intensify homogeneous processes:

- A) increase in concentration, decrease in temperature;
- B) increase in pressure and concentration;
- C) pressure and temperature reduction;
- D) decrease in concentration and temperature;
- E) pressure reduction.

34. Ways to intensify homogeneous processes:

- A) increase in concentration, decrease in temperature;
- B) decrease in pressure and temperature;
- C) pressure reduction;
- D) the use of catalysts;
- E) decrease in concentration.

35. Chemical catalytic processes are called heterogeneous if:

- A) reagents, catalyst and products are in one phase;
- B) the starting reagents and the catalyst are in the same phase, and the products are in different phases;
- C) occur at the phase boundary;
- D) only immiscible liquids are components;
- E) the use of a catalyst is mandatory.

36. Chemical catalytic processes are called heterogeneous if:

- A) reagents, catalyst and products are in one phase;
- B) the starting reagents and the catalyst are in the same phase, and the products are in different phases;
- C) only immiscible liquids are components;
- D) proceed at the interface-reacting substances-catalyst;
- E) occur only in the liquid phase.