

- B) efficiency and stability;
- C) simplicity of hardware design;
- D) ease of supply of raw materials and ease of construction.
- E) a high degree of conversion of the feedstock.

45. A heterogeneous process occurs in the transition region if:

- A) the chemical reaction proceeds most slowly;
- B) the convective transfer of the reagent proceeds most slowly;
- C) the reagent diffusion most slowly proceeds through the boundary gas layer;
- D) the diffusion rates of the reactants and their chemical interactions are comparable;
- E) the fastest stage is limiting.

46. A heterogeneous process occurs in the transition region if:

- A) the most slowly diffusion of the gaseous reactant through the ash layer;
- B) the convective transfer of the reagent proceeds most slowly;
- C) the reagent diffusion most slowly proceeds through the boundary gas layer;
- D) it is impossible to determine the limiting stage;
- E) the fastest stage is limiting.

47. The main methods for the preparation of active catalysts:

- A) precipitation and impregnation;
- B) neutralization;
- C) absorption;
- D) suspension and sedimentation;
- E) casting and impregnation.

48. Basic methods of preparation of active catalysts:

- A) neutralization and ion exchange;
- B) absorption;
- C) magnetic and electromagnetic;
- D) co-precipitation and sol-gel method;
- E) sublimation.

49. Substances used as carriers in the manufacture of catalysts:

- A) pumice, asbestos, silica gel;
- B) silica, expanded clay, agloporite;
- C) sodium chloride, sodium sulfate;
- D) potassium sulfate, sodium sulfide;
- E) calcium phosphate, calcium carbonate.

50. Minerals used as catalysts:

- A) bauxites and zeolites;
- B) phosphorites, gypsum;
- C) monazites;
- D) asharites;
- E) apatites, phosphates.