16. The nitrogen-hydrogen mixture is passed through a condensation column in order to:

A) capture of CO and CO_2;
B) pressure increase;
C) purification from methane;
D) purification from water vapor;
E) temperature exchange.

17. The nitrogen mixture was purified from CO_2 to prevent:

A) poisoning of ammonia synthesis catalyst;
B) poisoning of methane conversion catalyst;
C) overheating the reaction system;
D) poisoning of CO conversion catalyst;
E) overcoolings of the reactor.

18. In the reaction of the synthesis of ammonia, an increase in the yield of a product depends on:

A) the use of a catalyst;
B) reduction in nitrogen concentration;
C) pressure reduction;
D) an increase in methane concentration;
E) temperature reduction.

19. In the reaction of the synthesis of ammonia, an increase in the yield of a product depends on:

A) pressure increase;
B) reduction in nitrogen concentration;
C) pressure reduction;
D) an increase in methane concentration;
E) the use of a catalyst.

20. The following factors affect the reaction rate of ammonia synthesis:

A) a decrease in activation energy;
B) lowering the temperature;
C) an increase in the concentration of ammonia;
D) an increase in activation energy;
E) pressure reduction.

21. The optimal conditions for the synthesis of ammonia correspond to the conditions:

A) T = 600-700 ºC, P = 5-7 MPa, catalyst - Fe-Cr;
B) T = 430-450 ºC, P = 1 MPa, catalyst - Co-Ni;
C) T = 430-530 ºC, P = 30 MPa, catalyst - Pt;
D) T = 430-530 ºC, P = 30 MPa, catalyst - Fe;
E) T = 700-800 ºC, P = 10 MPa, catalyst - Cr.

22. The following catalysts are used in the technology of ammonia synthesis:

A) titanium;
B) rhodium;
C) nickel;
D) iron;
E) aluminosilicate.

23. The industrial catalyst used in the synthesis of ammonia: