

- B) melting and leaching of γ - Al_2O_3 ;
- C) leaching and crystallization of aluminosilicate;
- D) electrolysis of melt Al_2O_3 and Na_3AlF_6 in the presence of rare metals;
- E) electrolysis of the Na_3AlF_6 melt in the presence of metal fluorides.

21. Method of electrolytic separation of metallic Al from its oxide:

- A) melting and leaching of γ - Al_2O_3 ;
- B) electrolysis of Al_2O_3 and Na_3AlF_6 melt in the presence of metal fluorides;
- C) leaching and crystallization of aluminosilicate;
- D) electrolysis of melt Al_2O_3 and Na_3AlF_6 in the presence of rare metals;
- E) electrolysis of the Na_3AlF_6 melt in the presence of metal fluorides.

22. The introduction of metal fluorides into the melt during the electrolytic separation of Al from the oxides causes:

- A) improving the electrolysis of the aluminosilicate melt;
- B) enhanced electrolysis of Na_3AlF_6 melt;
- C) improved leaching and crystallization of aluminosilicate;
- D) improving the electrolysis of molten Al_2O_3 ;
- E) increasing the electrical conductivity of the electrolyte.

23. The introduction of metal fluorides into the melt during the electrolytic separation of Al from oxides causes:

- A) a decrease in the melting temperature of the electrolyte;
- B) improving the melting and leaching of aluminum;
- C) enhancing the electrolysis of the Na_3AlF_6 melt;
- D) improving the leaching and crystallization of aluminosilicate;
- E) improving the electrolysis of the Al_2O_3 melt.

24. The introduction of metal fluorides into the melt during the electrolytic separation of Al from the oxides causes:

- A) improving the wettability of the anode by the melt of the electrolyte;
- B) enhancing the electrolysis of Na_3AlF_6 melt;
- C) improving the leaching and crystallization of aluminosilicate;
- D) improving the electrolysis of molten Al_2O_3 ;
- E) improving the electrolysis of the aluminosilicate melt.

25. In electrolytic production Al with $T_{\text{melting}}=938$ °C eutectic is achieved when the content of cryolite in the melt is equal to:

- A) from 15 to 20% by wt.;
- B) 15% by wt.;
- C) 35% by wt.;
- D) 45% by wt.;
- E) from 25 to 60% by wt.

26. In electrolytic production Al with $T_{\text{melting}}=938$ °C eutectic is achieved when the content of cryolite in the melt is equal to:

- A) $\approx 15\%$ by wt.;
- B) $\hat{=}$ 35% by wt.;
- C) $\hat{=}$ 45% by wt.;
- D) from 20 to 40% by wt.;
- E) $> 50\%$ by wt.