

The invention relates to the processes for obtaining of catalysts for gas purification from toxic substances.

Summary of the invention consists in that it is proposed a process for obtaining of a metal catalyst, including application of intermetallic compounds on the support with the subsequent lixiviation of one of the components. In the capacity of support is used a metal screen. The intermetallic compounds nickel-cobalt-palladium with phosphor and boron additives are applied on the screen by electrochemical plating of metals at a temperature of 20...30°C, pH 8,5...9,5 and current density of cathode 2...4 A/dm<sup>2</sup> from the electrolyte containing, in g/L: nickelous chloride 30...50, cobaltic chloride 10...15, palladium chloride 3...5, ammonium chloride 120...150, sodium hypophosphite 10...15, dimethylaminoborane 1,0...1,5. Afterwards, it is carried out alitizing of the metal stratum in the aluminium melt (alloy D16) and lixiviation with solution of, in g/L: sodium hydroxide 500...700 and sodium nitrate 60...70 at a temperature of 100...140°C of one of the components of the intermetallic compounds.

The result consists in increasing the specific active surface of the catalyst and in increasing its adhesion to the metal support in conditions of great temperature variations during exploitation.