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## Changing the pH of the solution in the system Pb(II)-H<sub>2</sub>O-OH<sup>-</sup> by hydrolysis of precipitation Pb<sub>5</sub>(OH)<sub>x</sub>H<sub>2</sub>O<sub>y</sub>(An)<sub>z</sub>

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## **Abstract**

We studied the kinetics of acidification of the solution in the titration of Pb(II) by the solution NaOH and in the absence of titration. On the basis of experimental data and the provisions on the formation of supersaturated solutions and hydrolysis precipitation of  $Pb_5(OH)_xH_2O_y(An)_z$  a mathematical model of pH changes in the solution during the titration of Pb(II) by NaOH solution has been created. An equation of the amplitude of the shift of pH from an acidic solution hold time between additions of titrant portions.