

## **Abstract**

Bachelor's degree project devoted to development of automation of production of acetic acid oxidation of acetaldehyde.

In this project developed a scheme of automation; circuit diagram for remote control electric, emergency protection, technological locks and alarm; mathematical model of the reactor stirrer, made studies of this system made the synthesis of a closed control system with PI-regulator; calculated error of measuring channel costs acetic aldehyde inlet device for dissolving a catalyst. Also in this project considered the safety of the production process.

Explanatory note consists of 92 pages and contains: 40 figures, 6 tables, 2 appendix and 7 references.

Keywords: Automation, acetic acid, oxidation, acetaldehyde, reactor stirrer, simulation, static characteristics, dynamic characteristics, specifications, safety.