## Coursework on discipline «Mathematical models of chemical reactors» specialty 8.05020202 Computer-integrated technological processes and production Y. Slyusar group HA-51m Subject: '' Mathematical modeling and optimization of the reactor production of maleic anhydride from benzene ''

The course work was the preparation of maleic anhydride. These reactors for the vapor phase catalytic oxidation of benzene. The influence of the thermal effect of the process on the design of reactors.

Next it was reviewed process for producing maleic anhydride, analyzed parameters for the process.

In the third part of the course work developed a mathematical model of producing maleic anhydride from benzene. The simulation of a tubular reactor in MathCad environment and developed a software module in the environment of Visual Basic 6.0, check the correctness of calculations and presents the findings of the work carried out.