

Coursework on discipline
«Mathematical models of chemical reactors»
specialty 7.05020202
Computer-integrated technological processes and production
Andriuk V. K. group HA-51S
Subject: " Modeling of the reactor of oxidation of sulfur dioxide "

Coursework describes technology of oxidation of sulfur dioxide, its basic physical and chemical characteristics, methods of extraction, types of catalysts, use of sulfuric acid, ways to improve and prospects for further development.

Also in this work was reviewed mathematical model of isothermal ideal displacement reactor of continuous action for the oxidation of sulfur dioxide in a boiling layer vanadium catalyst. Calculations made by the model examined in an environment and in MathCad environment Visual Basic 13.0.

The developed module allows you to calculate the reaction rate and the time spent in a given volume mixture fate of gas at a given temperature and degree of conversion.