

## **Coursework on discipline**

**«Mathematical models of chemical reactors»**

**specialty 8.05020202**

**Computer-integrated technological processes and production**

**V. Kulibchenko group HA-51S**

**Subject: " Simulation of the ethylene oxidation reactor"**

In the course work was granted characterization methods oxidation of ethylene. We consider some of the ways technological design oxidation of ethylene.

Further, by physical and chemical bases of oxidation, his equation, the equation speed of the process and the time spent in the reactors mix-re. At the end of the first chapter described industrial oxidation methods ethyl, well, flow charts shown.

In the second part of the course work the mathematical model of the oxidation of ethylene. The simulation of a tubular contact devices in the environment MathCad and created software plug-in environments soup Visual Basic 2013, tested loyalty calculations and the conclusions of the work.