

*Course: System analysis of complicated chemical-technological complexes*

*Coursework:*

**“Study the process of obtaining 1,2-dichloroethane ”**

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### **Summary**

Process of obtaining 1,2-dichloroethane by reacting ethylene with chlorine in liquid dichloroethane at a temperature of 20-30 ° C was studied in these course work. The process flowsheet was considered and structural analysis was carried out. The Process flowsheet was simulated in the program ChemCad. Computer calculations were performed, in the course of work, and also obtained material and energy balances. The material balance was obtained with an accuracy of  $7,6 \cdot 10^{-4}$  %. As a result of the calculation was determined that the yield of 1,2-dichloroethane was 90%, which indicates high productivity of the process.