

ANNOTATION

The object is to create a master thesis process control systems biodiesel from rapeseed oil and transesterification process of obtaining models for finding the optimal mode of doing it.

Under the theme of master's thesis published two theses conferences.

Master's thesis contains an explanatory note volume 91 page. Explanatory note containing 30 figures, 11 tables, 28 references.

The object of research is the process of continuous transesterification process systems and periodic production of biodiesel.

The subject of the study is the optimal control system in the production of bio-diesel from rapeseed oil.

Sections explanatory note the features of the technological system, the analysis of existing models and control systems transesterification process, formulated criteria and restrictions for system optimization process developed structure of optimal control, defined methods and systems for optimal mathematical models of control systems in production, created a simulation model of the technological system.

The results can be used and implemented management systems biodiesel from rapeseed oil. A simulation model, which was implemented in MatLab Simulink software package can be used to configure the system optimal control during their implementation and normal operation and forecasting of quality products. The basic provisions of labor in the production of biodiesel.

Keywords: fuel, biodiesel, rapeseed oil, control systems, modeling, imitating model