Conclusion

A biodiesel reactor was made appropriate adjustments to increase efficiency. The reactor performance is examined by producing biodiesel from soybean oil in presence of methanol as alcohol and sodium hydroxide as a catalyst. The results showed that this reactor is capable for producing biodiesel in adequate amount, as well as glycerin and soap as by-products.

Recommendations

The recommended activities for future work are:

- All reservoirs must be completely sealed to avoid loss in the heat.
- All materials are transferred directly from the tanks through valves.
- Can be used waste vegetable oil after treatment and as well as oils that are not used in industrial fields.
- Heating the material in the tank directly by using fixed heaters, as well as use a thermometer to measure the temperature.
- Control panel consists of temperature controller, motor and heater switches to control heater and motors in the tank.