

## CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s) **Project Number** Meagan Lee **J1018 Project Title Biodiesel: Fuel for the Future Abstract Objectives/Goals** The goal of this project is to find out which source produces the best quality biodiesel. These sources include, fish tank algae, chlorella algae, scenedesmus algae, duckweed, and used fryer oil. Methods/Materials Press for algae-built from plywood and mechanical screws, and bolts Reacting Oil into Biodiesel-transesterification, blending methanol alcohol and sodium hydroxide Testing Quality of Biodiesel-pHLip test-bought online Scendesmus algae produced best, fryer oil produced second best, chlorella algae third, duckweed, fish tank algae last. **Conclusions/Discussion** By concluding which source created the most usable biodiesel, it is concluded that certain vegetable based sources can be renewable and converted into fuel. **Summary Statement** Converting different sources into biodiesel. **Help Received**