

Thrust Area 3: Biomass (Algae)

Constructual Optimization of Solar Photo-Bioreactors for Algae Growth

PI: Juan Ordonez

Students: Quinn Straub (MS), Tom Tracy (MS)

Description: This planning grant has allowed us to enhance our laboratory capabilities and personnel qualifications to support competitive proposals in the area of bio-fuels. By the end of this one-year effort, we have a complete design of a small-scale photo-bioreactor for algae growth and obtained additional funds that will allow us to build a large-scale photo-bioreactor and conduct the necessary research for its optimal design and operation.

Budget: \$15,000

Universities: FSU

External Collaborators: Federal University of Parana, Brazil

Executive Summary

This project is complete. Graduate students Straub and Tracy attended a 2-day seminar hosted by the University of Texas at Austin. The seminar exposed the students to fundamentals of the biological interactions of micro-algae, culturing techniques, culture maintenance, as well as, proper use of lab equipment. They also toured a culture collection that is one of the best in the world with over 3,000 species of algae.

This project has been completed.