

# hk625

## Cinthia Kim's Individual Contribution Page

### **Spring 2016 Contributions**

I aim to work on creating a backwash lagoon at the AguaClara design team this Spring 2016 semester. Designs and a clear task map of the challenge are in process and other challenges such as acquiring and updating shop drawings for the OSTARS mold will be tackled.

### **Fall 2014 Contributions**

During the Fall 2014 semester, I worked on the Materials List challenge with Aminta Nunez and Serena Takada for the Design Team. Initially, I set out to optimize the baffle cuts of the flocculator using the Honduran market price to ultimately calculate the minimum number and total cost of the needed baffles. After creating optimization functions that include the commercial restrictions such as price and the minimum width requirement, I endeavored to extract all the specifications such as the length, diameter, and width of all the hydraulic components and accessories of the AguaClara plant based on Drew Hart's Materials List for the Moroceli plant. The specifications were all extracted and compiled into matrices, however, due to their incompatibility with the Design tool, the method of extracting materials from MathCad was put on hold. Instead, I researched how to potentially extract the materials from the AutoCAD drawings. Using blocks and its relative functions, I wrote the blocking, attributing, and copying function. Essentially, I set down the groundwork for future AutoCAD extraction with my teammates.