# ktd23

## Katie Dao Individual Contribution Page

### Spring 2015

Subteam: Fluoride

#### **Semester Goals**

This semester, as part of the Fluoride sub-team, our goals are to design and build the physical filtering system that will be used to bring high levels of fluoride in ground water down to safe, potable levels. We plan to devise a system using a sand filter in conjunction with Polyaluminum Chloride in order to precipitate out the excess fluoride. Once the system is built, we will then work out a way to contaminate tap water so that it imitates ground water, then run trials to find the optimal dosage of PACI.

## Fall 2014

Subteam: Laminar Tube Flocculator

#### **Semester Goals**

The team's goals this semester are to work off of what the Summer 2014 team accomplished with the new Settled Water Turbidity system. We hope to reconcile differences between work done in the summer and that of Karen Swetland. We hope to do this by testing different doses of PACI in the aims of getting pC\* values between 0 and 2. By the end of the semester, our goal is to find an optimal PACI dosage as well as finalizing Karen Swetland's Floc Breakup Theory with our results.