

# eak244

## Ethan Keller's Individual Contribution Page

### Spring 2016

I am the team coordinator for the newly create Plant Operations Smartphone Tracker.

### Spring 2015

I advise the Fabrication and CDC team. I am on the Foam Filter team. We are experimenting with the small filter made in the fall to determine backwashing efficiency and to research how to improve performance for treating water with high concentrations of dissolved organic material. We are also preparing for our trip to Washington D.C. for the P3 expo in April.

### Fall 2014

I advise the Fabrication, Floc probe and CDC team. I am also on the Foam Filter team. We are currently building a small foam filter model that will be used to test backwashing performance, foam pore stratification performance and the ability of the foam to treat dissolved organic material. The large filter has been temporarily put on hold while we work with Walker to develop plans for improving the large filter built in Honduras.

### Summer 2014

During the summer I will be working with the Foam Filtration Team to design an upgraded filter that will be deployed to Honduras in July. I am also working with the wastewater team to summarize UASB literature and help advise the current team.

### Spring 2014

I built a large Upflow Anaerobic Sludge Blanket (UASB) bioreactor that is almost 20 times the volume of the previous reactors in order to address some of the plugging problems and general scaling problems with the small reactors. This new reactor was inoculated at the beginning of the summer of 2014 and so far has been far outproducing the earlier reactors in terms of bio gas. I also provided help with getting the smaller reactors tight, advising multiple teams with structural designs and evaluating the performance of the earlier UASB reactors.