Fluidized Bed Flocculator

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Our subteam's goal is to evaluate the possibility of using a fluidized bed of sand as a flocculator to accelerate the flocculation process. Other flocculators in the lab use bends and constrictions in tubing to generate particle collisions. The advantage of a fluidized sand bed flocculator is that it takes up much less space; the disadvantage is that it has much more head loss.

In Spring 2014, the team constructed the rapid mix unit, sand column, and SWaT (settled water turbidity) unit for the flocculator. We plan to share the constant head tank and coagulant dosing systems already in place for the turbulent tube flocculator. Future teams will need to set up the peripheral electronics and create a method file in process controller.

Members

Felice Chan Stephen Jacobs Jonathan Christensen Ana Oliveira Documents

	Challenges	Tasks	Symposiu m	Final Presentation	Final Report
Spring '14	? Unknown Attachment			? Unknown Attachment	? Unknown Attachment