

# Laboratory Experiment Proposal Submission

## Experimental Details

**Experiment location:** E134  
**Experiment title:** Carbon nanotube purification/suspension  
**Experiment date:** 08/19/2013  
**Experiment contactname:** Rana Ashkar  
**Experiment contactphone:** 812-272-6207  
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## Chemicals Used

<u>Chemical Name</u>	<u>Health</u>	<u>Flammability</u>	<u>Reactivity</u>	<u>Special Hazards</u>
Carbon Nanotubes	2	0	0	ACID
Sulfuric/nitric Acid	3	0	0	

## Reactants and Resulting Samples

<u>Chemical Name</u>	<u>Hazardous?</u>	<u>Known Hazards</u>
Carbon Nanotube Suspension In Dilute Acid	Y	corrosive, acidic

## Required Safety Equipment

- Glove Chemical
- Safety Glasses
- Lab Coat
- Hood Acids

## Required Laboratory Equipment

- Balance
- Centrifuge
- Ph Meter

## Experimental Write Up

10 mg of carbon nanotubes will be dispersed for 30mins in a 20% dilute acid solution (either sulfuric acid or nitric acid). This process should dissolve the metal content in the tubes as well as protonate the tubes. The solution will then be neutralized by the addition of sodium carbonate. The neutralized suspension will then be centrifuged and washed multiple times to get rid of the acid reaction products.

Experimenter Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Lab Responsible Signature: \_\_\_\_\_

Date: \_\_\_\_\_