General Questions for REU Interviews

Alex Canney
291 LASST
07/10/07

1. Tell us a little bit about yourself.

    - Going to school in Pensacola, Florida (Mechanical Engineering with a Math minor).
    - From Corinth, ME

2. How did you get interested in Science/Technology?

    - Started with curiosity about "things" in general, chose engineering because it is practical, not theoretical, more applied science.

3. Explain your project in simple terms.

    - Catalysts tungsten oxide (WO_3), find out characteristics porous vs. nonporous catalyst. Figure out if pores increase surface area so Alex is looking into to see if this extra surface area is useful (will pores be able to limit the size of the molecular chains).

4. What are some setbacks and successes you've had during this research experience?

    - Setbacks: complicated system, many times something will "be off" when running the machinery, human error is sometimes the cause, gauges need to set are working properly, etc
    - A bubbler is a little can with alcohol in it, line that goes in bottom, bubbles up purified air, two thirds up is methanol gas, problem is: as bubbles of air rise up (amount fluctuates unexpectedly with time).
    - Successes: Gets really exciting when the test works out the way he wanted, results matches his expectations prior to running the test. He has been able to improve some of the procedures.

5. How would you envision your research being used in a middle school science classroom?

    - Lab exercises involving pressure (ie. Cartesian diver, etc…)
    - One thing he's learned more then ever before, be random in choosing how you test something. It is a good idea not to try not to stick to patterns

General Questions for REU Interviews

6. What are your goals in regard to this research experience?

    - Prepare myself for "real world" job. He probably won't immediately pursue a Ph.D (too much research). Alex has acquired skills as a REU that he can transfer to his future career. This research experience also looks great on a resume.
    - Alex also believe that this experience has provided him a better understanding of research and he thinks it will make him more well rounded and able to better appreciate the efforts of researchers

7. What do you see yourself doing after graduation?

    - Thinking maybe getting master's degree in a science related field but still unsure. Alex would like to take more classes to sort out what areas he likes and which he doesn't like.

8. Where does your project fit into the FBRI project as a whole?

    - This is a process option to go from "tree to bottle of ethanol off the shelve", as well as testing the efficiency of the process.
    - This research is important for anything that uses catalysts