

# CHICAGO STATE UNIVERSITY

Department of Chemistry and Physics


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Report of activities supported by the Marsh White Award given to the Chicago State SPS Chapter

April 25, 2005,

This award was given to support outreach activities by the SPS chapter to nearby high schools, middle schools and students on campus. The following is a description of the activities we conducted as part of the grant.

## Outreach Activities:

1. *Middle School Visit to campus:* Members of the chapter participated in an activity for students at Vernon Johns Middle Academy who came to campus and participated in a hands-on tutorial on electricity and magnetism. The students built a motor out of Styrofoam cups, wires, permanent magnets and batteries. In addition, to the activity, students discussed studying physics in college. Dr. Sabella, Geraldine Cochran, Tim Vanderleest, and Virginia Hayes led the activity and the discussion.
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2. *Rocket Launch:* One of the participating physics teachers brought a set of rockets to campus and the campus community was invited to attend a launch of these rockets outside of the student union building. Both physics students as well as non-physics students attended the launch. SPS aided in working on and setting up the equipment and assisting the teacher in the activity.
  3. *Visits by the SPS club to two high schools (Thornton HS and Simpson Academy):* The members of the club visited physics classes at these two high schools. One of the club members gave a talk about careers in physics. Another talked about studying physics at the undergraduate and graduate level. SPS members discussed their experiences in the physics program at CSU, as well as their experiences conducting internships at different institutions. All of the club members answered questions from the HS students and distributed Physics Success Stories (AIP). Because the classes were only 45 minutes we were not able to carry out an organized activity. We did purchase materials for the activity and we plan to carry out additional outreach activities where we will utilize these materials with students at the middle and high school levels.
  4. *Open House on campus:* Members of the SPS chapter served as guides for groups of high school students who came to visit campus and attend an Open House given by the Department of Chemistry and Physics. Several different faculty and students made presentations and held informal lab sessions for the high school students. All of the students learned about careers in physics.
  5. *Science Fair Central:* Members of the SPS chapter helped run a series of three workshops for parents and students in the Chicago Public Schools and helped students plan and prepare experiments for the annual Science Fair in Chicago. Most of the schools served by the workshops are located on the southside of Chicago.

## Materials Purchased (with approximate costs)

| Item                            | Quantity Needed           | Cost              |
|---------------------------------|---------------------------|-------------------|
| Scissors                        | 10                        | \$10              |
| Balloons                        | 150                       | \$10              |
| Straws                          | 2 bags                    | \$5               |
| Diffraction Gratings            | 5 sheets                  | \$50              |
| Camera Film Canisters           | 80                        | Provided by CSU   |
| Envelopes, postage, and copies  | Approximation unavailable | Provided by CSU   |
| Calculator-based motion sensors | 10                        | Borrowed from CSU |
| Physics Success Stories         | 75                        | \$125             |
| Total                           |                           | \$200             |

This award offered the opportunity for many of our members to make presentations, talk to younger students about physics and to encourage parents to support the scientific interests of their children. We appreciate the support of SPS National in this endeavor. The SPS Chapter at CSU will continue conducting these outreach efforts to expose more students to physics.

Respectfully submitted,

Tim Vanderleest, CSU SPS Club President

Additional pictures from the Middle School Visit

