



American Vacuum Society
Tenn. Valley Chapter
Oak Ridge, TN 37830
NON-PROFIT ORGANIZATION
BULK MAILING PERMIT #13

**TENNESSEE VALLEY CHAPTER
AMERICAN
VACUUM SOCIETY
P. O. Box 5734
Oak Ridge, Tennessee 37831-5734**

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News from the Chapter

Awards and Scholarships

Science Education Materials Grants:

For the past several years, the Chapter has run a program which funds grants for science education materials for elementary and secondary schools in the Chapters region. Depending on the number and quality of applications, several grants of up to \$1000 each are awarded each year. The applications are judged on how the proposed teaching aids (equipment or other educational materials) would add to the quality of science education in that school or school district. While there are no restrictions on the subject area, the interests of the TVC-AVS members tend to favor the physical sciences.

Winners of TVC AVS equipment grants for 1996 were:

- Bethel Elementary, Simpsonville, SC (Mechanical)
- Forest Acres Elementary School, Easley, SC (Optics and Electricity)
- Clinton Elementary School, Clinton, SC (Simple Machines)
- Hunter Middle School, Ooltewah, TN (Electricity and Magnetism)
- Crestwood High School, Sumter, NC (Chemistry and Biology)

AVS High School Science Educator's program:

The Chapter also seeks applicants for the AVS High School Science Educator's program held each year at the national meeting. The selected teacher joins other high school science teachers from locations throughout the United States. Each of the teachers receives continuing education credit of 1.5 CEU, and their school districts are eligible for a grant to purchase vacuum equipment. All reasonable travel expenses are covered by the the Chapter.

Selected to attend the 1996 program in Philadelphia was:

Stephen Glover, Cookeville High School, Cookeville, TN

He sent us the following very nice letter:

I would like to thank each and every one of you for sending me to Philadelphia and the AVS Science Educator's Workshop. This was a very good and informative workshop. I look forward to using the newly learned information in my teaching of chemistry and physics.

I was one of 25 attendees from across the U.S. who participated in this workshop that was organized and directed by James Solomon from the University of Dayton.

After registration, introductions, and receiving our packets of material, we went right into low pressure demonstrations and hands-on activities of vacuum systems. I am always amazed, and continually enjoy to see and do vacuum experiments like expanding balloons and marshmallows. Since students always get a "big kick" out of seeing these demonstrations, I am looking forward to receiving the vacuum system from AVS.

Next in the workshop was a lecture on the principles of how vacuum pumps work and an experiment about pumping speed. I really liked the idea of us actually using the vacuum pumps so that we could get hands-on experience.

After lunch, we were transported to the University of Pennsylvania and to Drexel University for tours of labs where high vacuum systems were in use. These labs were very impressive. I was amazed to hear the scope of the high vacuum work that was being done. The enthusiasm exhibited by the researchers in imparting their knowledge to us was refreshing. My eyes were opened to some of the real science that goes on in education and industry.

Tuesday morning brought us more lecture/demonstrations and hands-on experiments allowing us to broaden our knowledge base in the use of vacuum systems. I really liked learning of the many practical uses vacuum systems in industry and in environmental settings. It is always important for my students to know the practical applications of science.

The second afternoon was spent going through the exhibits of vacuum equipment at the Pennsylvania Convention Center. The many exhibitors with whom I talked were very helpful and discussed their products and applications. All were very gracious and even offered to us teachers many of the free items they were giving away. This was another highlight of the workshop!

The final hour of the workshop was devoted to vacuum pump operation, maintenance, and safety. We got information specific to the equipment that we will be receiving for our classrooms.

In conclusion, this was a very good experience and I do appreciate the opportunity to be able to go. Thank you again for sending me to this conference and for your continuing support of science education.

Steve Glover

For more information on our educational outreach program check out our Web site at <http://luf.ssd.ornl.gov/TVC-AVS.html> or contact:

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Very late announcement: We have a new Executive Committee for this year that is a mixture of old hands and new recruits. You will find them listed in the box to the left.



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