

***Minnesota Science Teacher Association
Spring Conference
Duluth MN. 55803
March 28-29, 2008
Exhibitor and Presenter Report
By
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Background:

Our attendance at the Minnesota Science Teacher Association (MnSTA) is an extension of the collaboration between the Health Physics Society, the HPS Science Support Committee and the North Central Chapter of the Health Physics Society. We utilized the HPS booth display, poster boards, two laptop computers, electronic media, display items and paper handouts to get our message out to this target audience. Conference attendance was approximately 250 individuals.

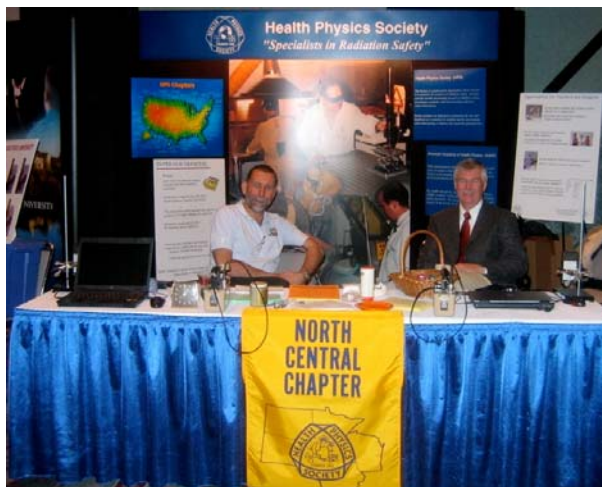
Presentation:

My Friday morning presentation titled, *Nuclear Science for Teachers; Practical Applications of Radiation, Radioactive Devices and Exercises for the Classroom*, garnered 15 attendees. I was disappointed until I learned from a conference organizer that most of the sessions had as few as three attendees and at the most, 12 to 13. My time allotment of 50 minutes was excellent. I completed the talk and conducted an 'on the screen demonstration' of an example of a common industrial application with time to spare.

The example consisted of measuring the response of a beta source through a sheet of paper. This represented the baseline measurement commonly used in paper manufacturing. After establishing the baseline measurement (a few dozen 2-second counts to demonstrate the statistical variability of the system), I inserted the sheet of paper into a plastic sleeve to represent a coating on the paper. The counts dropped by about 25% and I was able to explain that this measurement is used to monitor the actual weight of the coating represented in grams per square area. This is a very common application within paper manufacturing facilities and I was able to relate this demo to the actual applications at the New Page paper plant in Duluth. I wrapped up the presentation with five to seven minutes of question and answer.

Booth:

J. Doug Bennett, Medical Health Physicist, St. Mary's Hospital in Duluth, provided invaluable assistance on Friday from 8:00 AM until 12:30 PM. He covered our booth during my presentation and promoted our Science



Teacher Workshops, teacher awards, student awards and speaker availability. We staffed the booth from 7:30 AM until 2:00 PM on Friday and 7:30 AM until 12:30 PM on Saturday.

Traffic by the booth on Friday was brisk. I had 24 participants sign up for our drawing and even more stop to ask questions. Saturday was quiet with about 15 people stopping to visit and four people entering the drawing. I began with two computers, running the Vernier LabPro equipment, depicting the shielding lab. Again the results were dramatic with counts dropping by 50% when sheet metal was placed between the source and detector. I also utilized two Ludlum 3 meters and various NORM items to draw people toward the booth as well as the ubiquitous basket of candy. Almost every visitor to the booth (24+) walked away with informational literature describing our science teacher workshops, awards for students and teachers, speaker's bureau information and Vernier LabPro information.

Positives and Negatives:

Probably the largest item that didn't work completely well was the HPS booth display. While this is an impressive display and it does carry our "Radiation Specialist" message I found many people walking by with quizzical expressions. My conclusion is that no one could tell what we were offering to them by just looking at the booth display. My poster 2' x 3' poster board spoke to our Science Teacher initiative but you need to be close to the table to read it. My first thought is to print another attachment about the size of the "HPS Chapters" sign that would highlight our Science Teacher Workshops, Speakers bureau, Awards and other support endeavors. This attachable sign could be used when needed.

I didn't need to have two computers set to display the lab exercises. On Saturday I only set up one and rearranged the table. This eliminated some of the crowding. Also one Ludlum meter would have sufficed for the NORM items. Our papers describing Science Teacher Workshops, Science Teacher Awards, and Student Science Awards etc could be more eye catching. But what we use is certainly adequate.

Acknowledgement:

This endeavor would not have happened with out the support and involvement of many people and organizations within our chapter and the HPS. M. A. Lewandowski was invaluable as a sounding board and champion. Then there is my logistics staff, my wife Anne, who supported me and hung with me through this whole conference. We have worked booths at public events before and this was no different. The two of us had the booth set up in less than two hours on Thursday night. J. Doug Bennett who allowed me to leave the booth in good hands during my presentation and others who deserve credit for slides, materials, professional input, etc., are;

- ✧ HPS Science Teachers' Workshop Committee
- ✧ K. Classic, Mayo Clinic
- ✧ M. E. Jafari, Gunderson Lutheran Health Systems
- ✧ North Central Chapter of the Health Physics Society
- ✧ The Health Physics Society

✧ 3M Corporate Health Physics