

North Central Chapter, Health Physics Society
Minutes of the Executive Council Meeting
April 17, 2008
Iowa State University
Ames, Iowa

Attendees: Mike Lewandowski, Dan Miron, Steve Simpson, Marcum Martz, Mary Ellen Jafari, Leola DeKock, David Paulu, & Kimberly Knight-Wiegert.

Note: A copy of the executive meeting agenda can be found at the end of this report.

Called to order at 7:43 P. M. by President Mike Lewandowski.

1. The fall minutes from 2007 were discussed and approved by the committee. The minutes were accepted as written and will be posted to the web site.
2. Kimberly Knight-Wiegert presented the Secretary-Treasurer's report. It was accepted as written.
 - Checkbook balance: March - \$1,637.82
 - Savings account: March - \$872.79
 - Money Market fund: March - \$16,568

The chapter has 123 full time members (two new members since fall 2007), 16 emeritus members and 9 affiliates. Constant budget items are the \$500.00 Science Teacher Award, a travel stipend of \$300.00 if the teacher comes to the meeting and the \$500.00 Wissink Memorial Lecturer speaker stipend.

New Members: The executive council approved 2 new members, Liz Hauser and Victor Goretsky. All applications were reviewed and approved.

3. We reviewed the Affiliate Coordinator's report from Chris Kessler. The North Central Chapter of the Health Physics Society (NCCHPS) has 9 Affiliate Members for the calendar year 2008. We reviewed and approved DEQ. The NCCHPS web site reflects the current affiliate members.

Affiliates include:

ADCO Services, Inc. (Len Warbiany)

Global Dosimetry Solutions, Inc. (Tom Chwierut)

HI-Q Environmental Products Company (Marc Held)

ICx Radiation (Dale Elmore)

Image Technology (Barbra Johnson)

Landauer (Gary Beardman)

Philotechnics (Michele Patterson)

S&G Enterprises (Mark Griffith)

Scientific Instrument Sales (Richard Love)

Three affiliate members agreed to exhibit at the meeting: DEQ (Jeff Anspaugh), Global Dosimetry (Tom Chwierut), & Arrow-Tech (Barbara Johnson). A copy of the Affiliate Members Report is on file with the Secretary-Treasurer.

4. Dan Miron provided an overview of host, speakers, and presentations for the April, 18, 2008 meeting. Stephen Simpson, Assistant Director EH&S Iowa State University hosts this spring meeting. Registration will start at 7:30 with the meeting opening at 8:00 AM. We look to conclude around 4:15 PM.

Speakers include:

- An Overview of Radiation Litigation – Douglas M. Poland, Godfrey & Kahn, S.C..
 - Radiation Litigation: A Health Physicist's Perspective – Stephen Simpson, Assistant Director of EH&S, Iowa State University.
 - Radiation Litigation: An Expert Witness' Perspective – Sandy Perle, President of Global Dosimetry Solutions.
 - Department of Transportation shipping – Paul Ward, Zablocki, VA Medical Center of WI
 - Radiation Lab Kits for High School Teacher.
 - Technical Tour – EH&S / Regulated Materials Building (EHSSB).
5. Dan requested and received 4 CEC credits for the spring 2008 meeting from ABHP. The course number is # 20008-04-002. Mary Ellen Jafari will complete the newsletter write up for this meeting.

Old Business

1. Science and Education Committee update:

The Science and Education committee members include Jason Flora, Chair, Travis Beard, Gary Yarrow, Mike Lewandowski and Ken Kerns.

- Science Teacher Award

Although the committee encouraged both Ms. Weldon and Mr. Nelson (2007 applicants) to reapply for the Chapter's 2008 Outstanding Science Teacher Award, there were no applications.

- Science Teacher Workshop Update:

1. Nuclear Science Seminar Series

Mike Lewandowski submitted the following report. "The North Central Chapter has been collaborating with CESA 11 (the western Wisconsin Cooperative Educational Service Agency, a state agency to promote cooperation between districts and between districts and the state) in producing a three part seminar series on radiation-related topics. Seminar dates, presenters, and topics include:

March 5, Kelly Classic, Uses of radiation in health care and health effects of exposure to radiation.

April 2, Pete Wildenborg, Nuclear energy in the 21st century.

May 7, Ron Eustice, Minnesota Beef Council, Food Irradiation, and Nick Bates, 3M, Design and Safety of Industrial Irradiator Facilities.

Each seminar is held at Prescott, WI, High School in an interactive TV classroom. The seminar is simulcast to a number of schools throughout Wisconsin. Teachers at each school have the ability to interact with the presenter via voice and video. Seminars range from 60 to 90 minutes in length and are preceded by a brief introduction of the NCCHPS. Mike Lewandowski serves as the host and moderator for the series.

The series grew out of a discussion between Mike Lewandowski and Linda Jacobson, UW-River Falls Outreach Program Manager. The focus of the initial discussion was to establish a standing relationship between the NCCHPS and UW-RF to provide workshops for science teachers on a routine frequency. Including members of the UW-RF College of Education and the Physics Department did not result in any movement toward the expected outcome.

This seminar series was proposed as a one-time event by Ms. Jacobson. Seminar topics were suggested by CESA 11 through polling likely interested teachers.

Attendance at the first seminar was about a dozen and a half teachers and a half dozen high school students. Attendance at the second seminar was about a dozen teachers.

Presenters seemed to feel that this was a valuable use of their time. Outside of the time devoted by the presenters to create the presentation, there was not a lot of effort to facilitate the presentations.

I would like to recognize the NCCHPS members who made this series a success: Kelly Classic, Pete Wildenborg, and Nick Bates.”

2. Wisconsin Society of Science Teachers Convention 2008

Marc Martz and Dan Miron submitted the following report to the HPS Science Support Committee and North Central Chapter Executive Council Participants included; Marcum Martz from the Medical College of Wisconsin, Dan Miron from Cardinal Health, Paul Ward from the Zablocki VA Medical Center & Paul Schmidt from WI DHFS, Radiation Protection Section.

“WSST held its annual convention March 13-15 in Lake Geneva, Wisconsin. As part of the mission of the HPS Science Support Committee and the NCCHPS to bring health physics to attention of middle schools and high schools, representatives of NCCHPS participated as presenters and exhibitors.

The presentations consisted of two one-hour lectures and one three-hour lab workshop. The first lecture was on the topic of the fundamentals of radiation, including basic physics, units and sources of natural and man-made radiation. The nearly completed Power Point presentation by the SSC serves as the model for this lecture, which is well-suited as an introductory primer for middle/high school teachers. The second lecture was Radiation in Research, Medicine and Education. Both of these lectures were well-attended; we ran a little over the schedule due to many excellent questions asked, and much interest was generated. The three-hour lab workshop was less successful, possibly due to circumstances that were beyond our control: 1) the WSST program was accidentally printed with the page describing all the three-hour workshops left blank; no one knew about the workshop unless they pre-registered online. 2) The workshop was scheduled (by WSST) on the same morning of most of the off-site tours to such venues as Fermilab and Yerkes Observatory. Attendance at all of the onsite Friday morning activities and three-hour workshops suffered a similar downturn in attendance. The HPS three-hour workshop had only four attendees, who received very personal attention.

The exhibit booth was a great success. The exhibit hall was open on March 13 from 4-7 pm and March 14 from 8 am to 4 pm. The Wisconsin Department of Health, Lakeshore Technical College, the Medical College of Wisconsin and NCCHPS provided radiation and health physics handouts. Between the lectures and the booth, we distributed 72 binders containing health physics information and lab activities, and gave away 35 CDV-700 Geiger counters.

Observations

Total attendance at the convention was estimated at 600. Through the classroom/lab activities and the booth, we were able to speak to at least 25% of the total with a sustained

discussion about radiation and classroom activities. Several teachers inquired about having a health physicist visit their schools for a special classroom session with the students.

Teacher comments and evaluations indicated that for the state convention format, one-hour presentations/workshops were preferred over the three-hour format, since teachers are trying to cram as many different topics into their schedules as possible.

We each fielded many questions about career opportunities in health physics, medical physics and the radiation-related medical fields. Right behind information about classroom activities, this was likely the second most frequently-asked topic.

Recommendations

The state science teacher convention is possibly the most effective way to reach middle/high school science teachers. NCCHPS' previous work with the Wisconsin Association of Physics Teachers was good, but the number of teachers in attendance is small by comparison. The state level convention is also composed of all the sciences; health physics by its very nature is interdisciplinary and offers much to each of the physical sciences. As the state conventions move to different locations, there are many local teachers that attend, keeping the audience relatively fresh. It is our recommendation that NCCHPS plan to be involved with WSST annually.

Having the HPS booth available to anchor the displays in the exhibit hall was a tremendous asset in reaching teachers who did not attend our sessions. Depending on the cost and potential utilization at other state science teacher conventions within the NCCHPS region, the chapter should consider purchasing a similar booth for future use.

Lab exercises for the Vernier LabPro – develop recommended classroom activities for the kit that fits that equipment supplied. Revise the book to only include the experiments we suggest and add any others if appropriate. This would include revising the alpha/beta/gamma experiment since we are not providing the alpha source. Also, we should include some suggestions on experiments that do not use radioactive sources. One suggestion was to provide a schematic to show the teachers how to connect a CDV to their LabPro. It seemed like about 25% of the schools already have the Vernier LabPro in their school, but few had the GM detector.

Free handouts – Radioactive Goo (this was an item available a few years ago from Alpi International www.alpi.net), meters and other FREE stuff. Having the hook to get the teachers to stop at the table and talk worked well.”

3. Minnesota Science Teacher Association Spring Meeting 2008

Dan McGrane submitted the following report. “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 without 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"
- Instrumentation Kit Distribution
Mike Lewandowski reported on a proposed mechanism for distributing the radiation kits. Sample forms were distributed and comments received. The following proposal for determining the priority to use the kit was discussed.

Teacher requests are filled on the following priority:

1. Teachers who have previous positive experiences using the Instrumentation Kit.
2. Teachers who have attended a Chapter Train-the-Trainer workshop.
3. Teachers who have made contacts through interactions at Chapter booths at science teacher meetings or by personal contacts with Chapter members.
4. All other contacts.

The Council discussed participating in regional science teacher meetings as a method of outreach to teachers. The Council decided to attempt to participate in at least one meeting each year. For 2008-2009, we'll try for participation at the WSST meeting in Milwaukee and at the Iowa meeting in Des Moines.

2. Health Physics Society Awards

- National Student Science Award - no new applicants received but the Executive Council did select last year's runner up to advance to the HPS.
- The Executive Council nominated Kelly Classic for the HPS Founders Award.

3. Local Arrangement Committee report:

Dan McGrane represented the LAC and presented the estimated budget of \$2000 to promote the 2009 HPS Annual Meeting in Minneapolis. The LAC co-chairs plan to attend the upcoming HPS 53rd annual meeting in Pittsburgh, PA in July of 2008 with items such as pens, pins, and post it notes to promote the 2009 meeting. They also plan to ask members to help assist at the booth at the PA meeting. The Council agreed with the budget and asked to have co-chairs Jan Braun and Dan McGrane keep us updated with the plans.

Dan showed a draft logo with a sail boat and talked about looking at future LAC meetings. McGrane and Braun were looking at the Hilton Hotel (with a back up location at 3M) for a LAC meeting in late May or early June. A second LAC meeting is hoped to be scheduled early in September.

4. Other old business
None

New Business

1. New Member Applications:

The Executive Council approved 2 new members (Liz Hauser and Victor Goretsky) and one new affiliate (DEQ). All applications were reviewed and approved.

2. Election Results:

Written ballots were counted and combined with the on-line votes.

Newly elected officers include:

President Elect – Glenn Sturchio

Councilors - Jerry Artz and Robert McTaggart

These individuals take office at the end of the Business Meeting at the Fall Meeting.

3. Fall 2008 meeting location:

The fall spring 2008 meeting location will take place at Sorin Residence Hall, Hamline University, St. Paul, Minnesota. The executive council meeting location will be determined at a later time.

4. Councilor duties:

The question came up on how can the councilors be more involved in leading the chapter. Items mentioned were rotating the writing up to the news letter, working on putting together a brochure about who we are and what benefits do you get being a NCCHP member. The brochure is geared to members of the public and non chapter members. Mary Ellen, Steve and David volunteered to work together on getting a brochure.

5. Other New Business:

- Science Teacher Award Committee Chair:

Mike noted that Jason Flora has resigned and they will be a position opening up for the Science Teacher Chair. If anyone should know of someone who is interested to contact him.

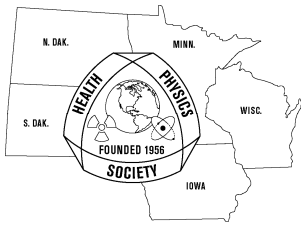
- Secretary-Treasurer position:

Another item that was brought up was the possibility of the Secretary and Treasurer to be split into two separate positions. In order for this to take place the by-laws will have to be addressed. This will be discussed and addressed before the fall meeting.

Meeting adjourned at 9:39 P.M.

Respectfully Submitted,

Kimberly Knight-Wiegert, NCCHPS Secretary-Treasurer



**NORTH
CENTRAL
CHAPTER**

**North Central Chapter
Health Physics Society
Executive Council Meeting Agenda
April 17, 2008
Iowa State University
Ames, Iowa**



- 1. Call to order.**
- 2. Review/approve fall meeting minutes.**
- 3. Secretary/Treasurer's report.**
- 4. Affiliates report.**
 - Sign DEQ application
- 5. Meeting details.**

Steve Simpson – review logistics
Dan Miron – review program and speakers
Newsletter write-up assignment
Dan Miron – ABHP CEC for the meeting

Old Business

- 1. Science & Education Committee update.**
 - Science Teacher Award – no nominee for 2008
 - Science Teacher Workshop update
 1. Nuclear Science Seminar Series – Mike Lewandowski
 2. Wisconsin Society of Science Teachers – Marc Martz (Dan Miron/Kimberly Knight)
 3. Minnesota Science Teachers Association – Dan McGrane
 - Instrument kit distribution
- 2. HPS awards.**
 - National Student Science Award – Bobby Sabota (UV exposure of butterfly chrysalides)
 - Founder's Award nomination – Kelly Classic
- 3. Local Arrangements Committee report.**
 - Jan Braun, Dan McGrane – co-chairs
- 4. Other old business.**

New Business

- 1. New member applications.**
 - Complete signatures and approvals.
- 2. Election results.**
- 3. Fall 2008 meeting location – Twin Cities Area, HPS President-Elect visit.**
- 4. Councilor assignments.**
 - How do Councilors want to be involved?
 - Needs: Student Science Award, Science Teacher Award, etc.
- 5. Other new business.**