



NCHPS NEWSLETTER

JANUARY 2007

President's message

John McLamb, NCHPS President

The North Carolina chapter of the Health Physics Society was chartered in the winter of 1965 with three main objectives. The founding members envisioned that the chapter would facilitate the spread of information among the health physics community, educate the public in the area of radiation protection, and promote the activities of the Health Physics Society. I believe that we have furthered all three objectives.

This year our chapter meetings provided an excellent forum for our membership to gather, share information and experiences. A major portion of the spring meeting in Asheville was dedicated to the regulatory changes in the security requirements for radioactive sources with large activity. The fall meeting, hosted by President Elect Ritchie Buschow, included a wide range of topics that would interest the health physicist community. Both meetings provided training courses for professional enrichment as well as ample time for socialization.

Our chapter has also hosted two national HPS President Elects in the past year. In January, Brian Dodd joined us for a talk and a great lunch at Café Luna in downtown Raleigh. In the fall, Kevin Nelson spoke at the meeting in Carolina Beach. Both President Elects were able to present their goals and agendas for the society.

The NCHPS continued its activities in the area of health physics education. As in years past, Dale Dusenbury worked with the NCSU student chapter of the ANS to educate educators at the North Carolina Science Teachers Conference in November. The chapter is sponsoring a student paper competition to encourage college students to further their studies in radiation safety. Several students from Francis Marion College indicated that they will be submitting papers in the competition.

This fall the executive council voted to sponsor a high school student essay contest this year. Science students are encouraged to answer the question "What is Radiation?" in three hundred words or less. The prize-winning essay will be voted on and chosen at the 2007 Spring meeting in Charlotte. The student and the

sponsoring science teacher will be awarded \$100 and a civil defense meter. I encourage each of you to forward the essay contest announcement located in this newsletter to any high school science teachers or students you think might be interested.

In December the chapter hosted a day long course on security aspects of the NRC's new requirements for increased controls of large activity radioactive sources. The training was targeted, not just for radiation safety professionals, but also the security personnel and law enforcement officials who would be required to respond to an incident. Six instructors from the DOE and NRC, led by Garry Titemore, first demonstrated to the group just how vulnerable our sources are and then taught us how to make them more secure. The next day the instructors performed an in depth security audit at local facility. If anyone missed the training or is interested in having an audit of their facility, contact Garry Titemore at Garry.Titemore@nnsa.doe.gov. These services are provided free of charge through the Department of Energy.



On a more personal note, I would like to thank you for the privilege of serving the chapter as its president. I feel that I have gained more than I have given in this position. The professional and personal

relationships that I have developed alone would have been worth any effort that I've had to expend. I would recommend that anyone who is able volunteer for a position on the executive council. While there is some work involved, it isn't arduous and well worth the effort.

I would also like to thank all of those who have served on the executive council. They have truly made my job as president a pleasure. Without these gentlemen and ladies, the chapter could not continue to exist.

Again thank you and I hope to see you all at the upcoming meetings.

Science Teacher Workshop Talytha Moore

It was a great success! We teamed up with the Nuclear Engineering Dept of NCSU with Lisa Marshall. Several hundred participants stopped by the booth with lots of questions about nuclear engineering and radiation issues. They were very interested on how to bring the radiation concepts, in an interesting and exciting way, into their teaching.



The seminar was a blast! There were over fifty participants in the class. David Howell is an excellent and entertaining speaker. Thanks David

for participating! Lisa Marshall is also an outstanding speaker and was very much appreciated by the attendees of the course.



Several participants of the course came up to the booth after class and there were rave reviews. Next year we hope to give the class at least two times so that more can participate. Giving away the "goodie" bags is a huge draw. Teachers are starving for "free" stuff to aid in their classroom discussions. In the goodie bag was a

detector, uranium sample pellets, lantern mantels, americium from the smoke detectors, an Understanding Radiation: a resource kit from the National Safety Council, and a few other goodies (pens, pencils, paper, etc). Lisa headed up the kit assembly and a few contributions were made by the NCHPS and NC Radiation Protection Section.

Hopefully, next year we can participate again. So I will be looking for speakers and volunteers once again next fall!

NCHPS Fall 2006 Meeting Review Ritchie Buschow, President-Elect

The fall 2006 meeting of the North Carolina Health Physics society was held November 2 and 3, 2006 at the Courtyard Marriott in Carolina Beach. Over sixty people were in attendance to enjoy a wide variety of health physics topics. The meeting began with a presentation by Dr. Kevin Nelson, HPS President-Elect on responding to medical radiological incidents. Lisa Marshall from the Department of Nuclear Engineering at NC State University ended the meeting with a discussion of how the department recruits students for the nuclear industry and health physics profession. Chris Martel from the Boston University Medical Center provided a humorous look into the process of making the transition from an Industrial to a Medical Health Physicist and what each field can learn from the other.

Other topics ranged from the calibration of a neutron source by the National Institute of Standards Technology (by, Ben Edwards) to presenting data in a simplified form given by ex-North Carolinian Dr. Robert Emery. In addition there was a presentation by Paul Snead on background levels of tritium in various water supplies. Ted Campbell from the NC Department of Water Quality provided some excellent data on the levels of radon found in various drinking water supplies in North Carolina.

Dr. Dade Moeller gave two presentations; 1) on dose estimates to the general public near the Yucca Mountain high level radioactive waste repository and 2) the proposed involvement of the nuclear power industry in estimating potential dose from sources of radon near nuclear power plants to estimate the collective background doses to individuals from both sources.

Finally, Dr. Dan Sprau gave an informative talk on the recent visit of his ECU Public Health class to the Chernobyl nuclear site in Kiev, Russia.

I would personally like to thank all the vendors for their continued support with these meetings. I would also like to thank Chuck Passo and Julie Ginsler of Perkin Elmer for sponsoring an informative short course on liquid scintillation counting conducted prior the meeting. Twelve individuals attended this short course.

Presentations from the meeting can be found on the NCHPS website at

<http://www.hpschapters.org/northcarolina/meetingfall2006.php3>.

Changes in N.C. Radiation Protection Section Marion Eaddy

The Radiation Protection Section has been busy re-organizing and re-thinking the way we deliver our services for the past 18 months. Currently, the Section is organized into five (5) Branches:

Administration Beverly O. Hall, Section Chief
Emergency Response & Environmental Dale Dusenbury, Manager
Mammography & X-Ray Jenny Rollins, Manager
Radioactive Materials Lee Cox, Manager
Registration, Enforcement and Tanning Amy Sawyer, Manager

As part of that re-thinking, we have developed unique opportunities for home-basing of some of the field staff. Currently the Mammography and X-Ray Branch has five home-based inspectors and the Radioactive Materials Branch has two. Home-basing of inspectors means shorter trips for the staff, which equates to more time inspecting than traveling and lends itself to our overall goal of a safer workforce. Home-basing also helps us to do more outreach in education in the regions by home-basing the employees.

Mammography Program

Mountain Region Regina Stowe
Piedmont Region Lane Green
Coastal Plains Wendy Moore
Raleigh Area Jon Granger

X-Ray Program

Western Region Dawn Burke
Central Region Bonnie Kanoy

There are plans in place to continue regionalizing the X-Ray program. Regional contact information is available on the Mammography and the X-Ray sections of our website (www.ncradiation.net).

The Radioactive Material (RAM) Branch has been expanded to include eight fulltime staff members, one half-time member, and one Manager. We have two home-based full time inspectors covering the Western (Cliff Harris, Ph.D) and Central regions (Sharn Jeffries, MS). We have two half time licensing and half time inspectors covering the Northeast (James Albright, MA) and Southeast regions (Randy Crowe). Grant Mills, MS is our security coordinator, 24/7 incident response coordinator and part time licensing. Wendy Tingle is our low-level radioactive waste coordinator and part time licensing. Gerald Speight, MSPH is our full time licensing coordinator and NMED coordinator. Marion Eaddy, MSEH is our regulatory affairs coordinator, sealed source and device coordinator, and document, database and webmaster. William Johnson is a part time employee coordinating the entire general licensing program.

This new RAM structure allows us to be more efficient and consistent in our implementation of a statewide regulatory program for radiation protection. This new structure allows us to coordinate oversight of radioactive material more effectively from the cradle to the grave. There is more coordination and communication of licensing, inspections, security, incident response, terminations and eventual waste disposal under one umbrella. This concept and organization is consistent with the RAM Branch's mission and strategy of promoting the statewide safe use of radioactive material while maintaining a preventative posture against its misuse.

New Members to NCHPS – Brian Cripe

Please welcome:

Randy Crowe – NC DENR

Bryan Newton – Syngenta

Derek Jokisch – Francis Marion



WHAT IS RADIATION???



If you are a high school earth science, chemistry or physics student,
the North Carolina Health Physics Society
would like you to answer this question!

**PRIZE: \$100.00 and a Civil Defense Radiation Meter
(For the winning student and his/her teacher)**

Contest Rules:

- ❖ Submit your original answer in 300 words or less, typed
- ❖ Entries must be postmarked by **February 1, 2007**, include your paper and entry form
- ❖ All qualified entries will be judged at the Spring NC Health Physics Meeting in Charlotte by society members. Awards will be presented at the participant's school

Student Paper Competition

The 2006-2007 student paper competition sponsored by our Society is calling for papers from students (**undergraduate, graduate or post doctorate**) who are enrolled in an accredited institution of higher learning and performing research. The competition is an oral presentation on any subject applicable to the field of health physics, radiological health or bio-radiological health. The student may report on completed original research or works in progress.

How to Enter:

Submit an abstract of their paper (not more than 150 words) to:
Student Paper Competition
North Carolina Health Physics Society
P.O. Box 20051
Raleigh, NC 27619

All Submissions must be received on or before **January 15, 2006**

Competition:

1. The best four papers will be chosen and those students will be asked to make an oral presentation at the NCHPS Spring meeting on February 22-23, 2007 in Charlotte, NC.
2. Each student's presentation will be limited to 20 minutes. The competition winner will be announced at the end of the meeting.

Prizes:

1. Each student chosen to present will receive free admission to the Spring NCHPS Meeting, one night stay at the meeting hotel and a certificate of participation.
2. The best presentation, as determined by the student paper committee, will receive either \$150 cash or \$750 in reimbursement as explained below.
 - a. If winner has been selected to present at the National Health physics Society meeting held in Portland, OR on July 8-12, 2007, he or she will receive reimbursement of expenses, up to \$750 to attend the national meeting.
 - b. If not presenting at the national meeting the best presenter will receive a \$150 cash award.
3. The committee reserves the right to select fewer presenters depending upon the quantity and or quality of submissions.



North Carolina Health Physics Society 2006 “What is Radiation?” Student Paper Contest

Student Name: _____

Please circle: Earth Science student Chemistry Student Physics Student

Teacher’s Name: _____

Name and Location of School: _____

School Phone Number: _____

Contest Rules:

- Original answers to the question, “What is Radiation?” should be 300 words or less; original entries will not be returned to the student or teacher; illegible entries will be disqualified (typed entries are recommended)
- All entries must include this entry form and the essay to be considered
- All entries must be postmarked by February 1, 2007
- Qualified entries will be posted on a bulletin board and judged by society members at the North Carolina Health Physics Society Meeting, February 22-23, 2007 in Charlotte, North Carolina
- The prize is \$100.00 and a Civil Defense Meter for each the student and the sponsoring teacher; the awards will be presented at the student/teacher’s school, with permission of the school’s administration
- All entries should be mailed (postage paid) to:
Amy Orders, Radiation Safety Officer, NC State University
2620 Wolf Village Way, CB 8007
Raleigh, NC 27695
919-515-5208 or amy_orders@ncsu.edu

SPRING 2007 NCHPS MEETING ANNOUNCEMENT

Mark your calendars, the Spring 2007 meeting of the North Carolina Health Physics Society will be held **February 22 and 23, 2007** at the Charlotte Omni Hotel, Charlotte, North Carolina. The hotel room rate is the government per diem rate at the time of arrival. A buffet dinner will be served on Thursday evening.



Speaker includes:

Jay Tarzia, CHP - Connecticut Yankee Decommissioning Project
Chris Passmore, CHP – OSL Imaging; OSL Technology in Personnel Dosimetry, Medical and other Applications
William Byrum, CHP – Nuclear Power Calibration Lab Operations
Jim Twiggs – Alloy 600 ALARA Project Oconee Nuclear Station
Arthur Desrosiers, CHP – Innovative Approach for Radon Control
Robert Dixon, PhD. – Faith-Based Radiation Protection
Jim Gaiser, PhD. – New and Emerging Radiation Oncology Technology
Igor Akushevich, PhD. – Population Models of Health Effects from Ionizing Radiation
Ann Dean – NC Tanning Booth Regulations/Inspections

Registration:

A pre-registration fee of \$50.00 for NCHPS members and \$55.00 for non-members (includes Thursday evening buffet dinner) is due by February 1st. After February 1st the registration fee is \$55.00 for members and \$60.00 for non-members and may be paid at the door. Non-registering guest buffet tickets are available for \$15.00/ea. See the registration form below. Information on NCHPS membership may be found at <http://www.nchps.org>

Hotel Reservations:

The Omni Charlotte Hotel is located at 132 E. Trade Street, Charlotte, NC. It is an excellent location in downtown Charlotte. A block of rooms are being held at a discounted price at the government per diem rate (at the time of arrival, between \$75- \$81). This block will be held till January 22, after which rooms will be subject to availability. For reservations and directions to the hotel call (704)-377-0400 <http://www.omnihotels.com/FindAHotel/Charlotte.aspx>. On-line registration is available at this website (**use the group code 16300104357**).

Course:Radioactive Material

Shipment/Transport Refresher Training:

Ben Edwards will sponsor a short refresher course on shipping radioactive material using both DOT and IATA regulations. The cost for the course is \$50. All course participants must pre-register by February 8th. The course will be held in conjunction with the NCHPS Spring Meeting in Charlotte from 8 AM – 12 noon on Thursday February 22. This training has been approved for eight continuing education credits by the AAHP. This is a great opportunity to obtain refresher training at a very reasonable cost. The chapter reserves the rights to cancel this course if not enough participants register.

Vendors:

Thermo Fisher Scientific
Canberra
Ludlum Measurements, Inc.
Perkin Elmer
WM B. Johnson & Associates
Radiation Safety & Control Services, Inc.
Philotechnics, Ltd

*Please contact Ritchie Buschow,
Pres-Elect, NCHPS at 919-541-0550
or buschow.ritchie@epa.gov if you
are interested in having your
company represented at this meeting.*

NCHPS 2007 Spring Meeting Registration Form

Name: _____

Company: _____

Address: _____

Phone: _____

Email: _____

Pre-Registration Fee Enclosed

___ \$50 NCHPS Member

___ \$55 non-NCHPS Member

___ \$5 Student

___ \$15 Guest Buffet

___ \$50 DOT/IATA Course

Make checks payable to (sorry we do not except credit cards or PO): **North Carolina Health Physics Society (NCHPS)**

Mail to: **Ritchie Buschow
U.S. EPA
Office of Research & Development
109 T.W. Alexander Drive
Room D330B, Mail Code D343-02
Research Triangle Park, NC 27711**

Executive Council – 2006/2007 Session

I. Elected Officials

Office	Name	Telephone	Mailing Address	E-mail Address	Elected
Past President	Gerald Wicks	919/515-4601 (W) 919/515-5115 (Fax)	NC State University 2119 Burlington Lab, Box 7909 Raleigh, NC 27695	wicks@eos.ncsu.edu	2004
President	John McLamb	919/541-4235 (W) 919/541-1893 (fax)	NIEHS/Rad Safety Office (F070) 111 T.W. Alexander Dr. RTP, NC 27709	Mclamb1@niehs.nih.gov	2005
President-elect	Ritchie Buschow	919/484-7524(H)	7 Kandes Ct. Durham, NC 27713	buschow.ritchie@epa.gov	2006
Secretary	Amy Orders	919/515-5208 (W) 919/513-2690 (fax)	NC State University 1150 Varsity Drive, Box 8007 Raleigh, NC 27695-8007	amy_orders@ncsu.edu	2006
Treasurer	James Albright	919/571-4141(W)	Div. of Rad. Protection 3825 Barrett Dr. Raleigh, NC 27609	james.albright@ncmail.net	2005
Council person	Roger Sit	919/962-5711(W)	1120 Estes Drive Extension Campus Box 1650 Chapel Hill, NC 27599-1650	rsit@unc.edu	2004
Council person	J. Marion Eaddy III	919/571-4141(W)	Div. of Rad. Protection 3825 Barrett Dr. Raleigh, NC 27609	marion.eaddy@ncmail.net	2005
Council person	Jonathan Moore	919/ 962-5713 (W)	1120 Estes Drive Extension Campus Box 1650 Chapel Hill, NC 27599-1650	jdmoore@ehs.unc.edu	2006

II. Standing Committees/Appointees

Committee	Chair	Telephone	Mailing address	E-mail Address
Program	{President elect}			
Public Info/ Education	Dale Dusenbury, Jr	919/571-4141 (W) 919/571-4148 (fax) 919/217-0989 (H)	Div. of Rad. Protection 3825 Barrett Dr. Raleigh, NC 27609	Dale.dusenbury@ncmail.net
Nominating	[Past President]			
Newsletter Editor	Giao Nguyen	919/668-3185 (W) 919/327-6718 (H)	7641 Astoria Pl Raleigh, NC 27612	nguye019@mc.duke.edu
Membership	Brian Cripe	704/384-3500 (W) 704/316-1348 (fax) 704/867-3695 (H)	709 Woodhaven Lane Gastonia, NC 28056	brian@ncradcom.com
Public Issues	David Lee	919/791-4203 (W) 919/ 846-6321 (H)	8033 Wavendon Ct. Raleigh, NC 27615	David.Lee@ncmail.net
TOREV	Vacant			
Student Paper	Vacant			

III. Adjunct Members/Appointees

Program	Chair	Telephone	Mailing Address	E-mail address
Science Teacher Workshop	Dale Dusenbury, Jr	919/571-4141 (W) 919/571-4148 (fax) 919/217-0989 (H)	Div. of Rad. Protection 3825 Barrett Dr. Raleigh, NC 27609	Dale.dusenbury@ncmail.net
Survey Meter Custodian	Bill Fitzgerald	919/541-3383 (W) 919/544-4323 (H)	NIEHS/Radiation Safety Office (F070) 111 T.W. Alexander Dr. Research Triangle Park, NC 27709	fitzger5@niehs.nih.gov
HPS/Chapter Liaison	Joseph Alvarez			jalvarez@auxier.com
Historian	Amy Orders	919/515-5208 (W) 919/513-2690 (fax)	NC State University 1150 Varsity Drive, Box 8007 Raleigh, NC 27695-8007	amy_orders@ncsu.edu



HEALTH PHYSICS SOCIETY NORTH CAROLINA CHAPTER

MEMBERSHIP APPLICATION

<p>1. Complete the application below. If you are not a member of the Health Physics Society, signatures of two members in good standing of the chapter are required.</p> <p>2. New membership dues paid after September 1 will apply through the following year.</p> <p>Chapter Dues \$ 15.00 /year Student/Science Teacher Dues 5.00 /year Affiliate Dues 40.00 /year</p> <ul style="list-style-type: none"> • Make check payable to the North Carolina Health Physics Society. <p>Send the completed application and dues to the Membership Committee Chairperson: North Carolina Health Physics Society PO Box 20051 Raleigh, NC 27619-0051</p>	<p>Affiliate membership in the NCHPS is limited to organizations having a professional interest in the general field of radiation protection. This class of membership offers the following privileges to an organization:</p> <ul style="list-style-type: none"> • Acknowledgment in each issue of the Chapter Newsletter and in the Chapter Directory. • One year regular membership for an individual from the organization. • Receipt of all official Chapter mailings (including the Chapter Newsletter). • Access to and commercial use of the Chapter Membership Directory. • \$50.00 off normal exhibitor fees to display products/services at NCHPS chapter meetings.
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Name: _____

Address Line 1: _____

Address Line 2: _____

Address Line 3: _____

City _____ State _____ Zip _____

Company/School: _____

Business Phone: (____) _____ - _____

FAX: (____) _____ - _____

Home Phone: (____) _____ - _____

EMAIL: _____

Education (institution, major field, degree, and date): _____

Signature & Date _____

Are you a member of the National Health Physics Society?
 YES NO

Sponsor's Signature _____

Professional Certifications (CHP,CSP,CIH,etc.): _____

Sponsor's Signature _____

Applying for :

Chapter Membership{ }
 Student Membership{ }
 Science Teacher mailing list ...{ }
 Affiliate Membership{ }

<p>FOR CHAPTER USE ONLY:</p> <p>APPLICATION RECEIVED: _____</p> <p>APPLICATION REVIEWED: _____</p> <p>APPROVED YES / NO _____</p> <p>NEW MEMBER INFORMATION PACKAGE MAILED: _____</p> <p>DATABASE ENTRY COMPLETE _____</p>	<p>EXECUTIVE COUNCIL APPROVAL (IF NOT HPS MEMBER)</p> <p>COUNCIL MEMBER _____</p> <p>COUNCIL MEMBER _____</p> <p>COUNCIL MEMBER _____</p> <p>COUNCIL MEMBER _____</p>
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Affiliates of the North Carolina Chapter of the Health Physics Society

<p>Protean Instruments Corporation</p> <p>Jon Sonewald 231 Sam Rayburn Pkwy Lenior City, TN 37771 865-717-3456</p>	<p>Thermo Electron</p> <p>David Nice 303 Wingcup Way Simpsonville, SC 29680 Tel: (864)963-7996 Cell: (864)-630-9703</p>	<p>Bionomics Inc</p> <p>John McCormick PO Box 817 Kingston, TN 37763 865-220-8501</p>	<p>Laurus System Inc.</p> <p>Laura Lynch 8779 Autumn Hill Drive Ellicott City, MD 21043 (410) 465-5558</p>
<p>PerkinElmer Life Sciences</p> <p>Julie Ginsler 218 Parkridge Drive Clayton, NC 27520 P: 919-553-4698 C: 919-522-6741</p>	<p>Wm B. Johnson & Assoc</p> <p>Dick Landfried PO Box 472 Ronceverte, WV 24970 (304) 645-6568</p>	<p>Ludlum Measurements</p> <p>Dwane Stevens PO Box 810 Sweetwater, TX 79566 (915) 235-5494</p>	<p>Global Dosimetry Solutions</p> <p>Terry C. Moore 1924 Falling Creek Circle Mt. Pleasant, SC 29464 P: 843-849-9093 C: 843-991-5291</p>
<p>Canberra Industries</p> <p>Ron Vermilye 800 Research Parkway Meriden, CT 06450 800-243-3955</p>	<p>DEQ Technical Sales</p> <p>Ray McPhillips 7767 Maida Vale Circle Powell, TN 37849 865-621-5123 (cell), 865-947-5123 (office)</p>	<p>Ortec</p> <p>Marc Menigo 801 South Illinois Ave. Oak Ridge, TN 37830 (770) 979-3957</p>	<p>Philotechnics, Ltd</p> <p>Annette Hansen 201 Renovare Blvd. Oak Ridge, TN 37830 865-285-3009 direct 865-406-8106 cell</p>
<p>Ecology Service Inc</p> <p>Paul Marshall 102200 Old Columbia Rd Columbia, MC 21046 (410) 381-2600</p>	<p>RSO, Inc.</p> <p>Wendy Caulk P.O. Box 1450 Laurel, MD 20725 888-723-5463</p>	<p>Landauer Inc</p> <p>Carl Milam 782 Dunshea Court Kennesay GA 30144 800-323-8830</p>	<p>F&J Specialty Products, Inc.</p> <p>Frank Gavila 404 Cypress Road Ocala, FL 34472 (352)680-1177 fax (352)680-1454 fandj@fjspecialty.com</p>