

December 2019

TABLE OF CONTENTS

FROM THE PRESIDENT

Happy Holidays From Me (Eric).....	2
------------------------------------	---

FROM THE EDITOR

To-Do List.....	3
-----------------	---

SOCIETY NEWS

Vote for HPS Officers and Board Members Now.....	3
Now Is the Time to Renew Your HPS Membership.....	4
Don't Miss the Deadline for Student Scholarships, Fellowships, and Grants.....	4

HPS MEETINGS

2020 HPS Midyear Meeting.....	4
2020 HPS Midyear Meeting Registration Open.....	4
Last-Minute Tips.....	4
2020 HPS Annual Meeting.....	5
2020 HPS Annual Meeting Call for Abstracts.....	5
2020 HPS Annual Meeting: Be Part of the Future.....	6
Preparing for the 65th Annual Meeting of the HPS.....	7

COMMITTEE NEWS

Membership Committee.....	7
---------------------------	---

CHAPTER NEWS

Columbia Chapter.....	7
New England Chapter.....	8
Baltimore-Washington Chapter.....	8

HEALTH PHYSICS JOURNAL/ORS NEWS

The Common Denominator: January <i>Health Physics Journal</i>	9
---	---

ABHP PART II Q&A PAGE

Problem 13: Internal Dosimetry and Instrumentation for Positron Emitters.....	9
---	---

CAN WE TALK?

No. 5 – How Can HPs Learn to Deal With Feelings?.....	10
---	----

HPS MEMBERS IN THE NEWS

HPS Members Appointed to Texas Radiation Advisory Board.....	11
--	----

HPS STANDARDS CORNER

US and HPS Participation in International Technical Standards Part 1: What Is International Standardization and Why Is It Important?.....	11
US and HPS Participation in International Technical Standards Part 2: The ISO Standards Development and Review Process.....	13
ANSI/HPS N13 Annual Business Meeting.....	14

WHAT'S NEWS?

NCRP Publishes Reports No. 183 and No. 184	14
December <i>CHP Corner</i>	15

DECEMBER 2019 SHORT COURSE LISTINGS

Packaging and Shipping Class 7 (Radioactive) Material	16
Certification Review Course Part I; Self Study Course Part I; Background Materials Review; Part I Question & Answer CD and Site License; Part I Additional Question & Answer Volume; NRRPT Question & Answer CD and Site License	16
Radiation Safety Officer Training Class	17
Facility Decommissioning Training Course	18
Advertising in <i>Health Physics News</i>	18



Happy Holidays from the Web Ops team!

Mary, Emily, Marcia, Fred, Craig, Sharon, Kelly

FROM THE PRESIDENT

Happy Holidays From Me (Eric)

Eric Goldin, HPS President, 2019–2021

This is just a quick note to wish you all a Happy Holiday season—stay warm and stay safe. I've been super busy both at work and away from work and intend to get a longer note out soon (the supreme procrastinator says confidently). I know for many of you this has been an early cold and perhaps snowy winter. For those of us on the left coast, it's been pretty cool and plenty rainy.

[Return to Table of Contents](#)

Activities are ramping up quickly for the [2020 Health Physics Society Midyear Meeting](#) in Bethesda at the end of January. Our Program Committee, led by Chair Chris Shaw, has done a great job assembling a terrific program. We're going to have lots of presentations covering everything from environmental topics to military health physics, emergency planning to regulatory issues. The National Council on Radiation Protection and Measurements is holding the two-part Special Session on Radiation Protection in Medicine that will provide cutting-edge information for a rapidly changing field. Abstracts are posted already on the [program link for the meeting](#) (on the publicly available portion of the website). And don't forget, start planning your summer—the [annual meeting](#) in early July at the Gaylord National Resort in National Harbor, also outside Washington, DC. There's plenty of time to make contacts at the midyear and prepare your presentations for the annual.

Again, have a great holiday season with friends and family. Stay safe, have fun, and I hope to see you in Bethesda in January.

FROM THE EDITOR

To-Do List

Kelly Classic, Web Operations Editor in Chief

This edition of *Health Physics News* finds us between the holidays. It also has four specific to-do items for you:

1. Vote for officers and directors. You have the opportunity to help set the future direction of the HPS.
2. Renew your HPS membership. The free and reduced-price NCRP reports alone will pay for your membership.
3. Register for the 2020 HPS Midyear Meeting in Bethesda, Maryland. It looks like another engaging and packed agenda.
4. Submit an abstract for the 2020 HPS Annual Meeting. Get ready once again for the annual HPS get-together!

SOCIETY NEWS

Vote for HPS Officers and Board Members Now

Online voting for Health Physics Society (HPS) officers and Board members is underway. To cast your vote, go to the [Members Only area of the HPS website](#) and sign in. The election link will be on the right side of the page under "Resources for You" and the box is labeled HPS Election. If you need assistance, call the HPS Secretariat at 703-790-1745.

Polls close 11 December 2019 and the Election Page will be taken offline at 5 p.m. EST that day.

The president-elect candidates are John Cardarelli II and Joseph P. Ring. The secretary-elect candidates are Nicole E. Martinez and Charles Wilson IV. Candidates for director are Manuel Diaz, Deirdre Elder, Kathryn Higley, and Jama Vanhorne-Sealy (vote for two directors).

Take a moment and vote now!

[Return to Table of Contents](#)

Now Is the Time to Renew Your HPS Membership

Lainy Cochran, Membership Committee Chair

Please take a moment now to [renew your Health Physics Society \(HPS\) membership](#) so you continue to receive the [many benefits](#) provided to Society members.

The HPS Membership Committee kindly reminds you to update your directory information while completing your membership renewal, including specifying up to two health physics specialties.

Don't Miss the Deadline for Student Scholarships, Fellowships, and Grants

Students, it is time to apply for awards to help toward your health physics education. The [Students section](#) of the Health Physics Society (HPS) website offers an abundance of information on scholarships, fellowships, and grants available to health physics students.

For 2020–2021, HPS is offering [scholarships](#) and several [fellowships](#). The deadline for [submission of applications](#) for scholarships and fellowships is 27 February 2020.

The HPS also offers [travel grants and travel/worker grants](#) for HPS member students planning to attend the next annual meeting of the HPS. The deadline for [submission of applications](#) for travel and travel/worker grants is 27 February 2020.

HPS MEETINGS

2020 HPS Midyear Meeting



2020 HPS Midyear Meeting Registration Open

[Online registration is open](#) for the 2020 Health Physics Society (HPS) Midyear Meeting being held 26–29 January in Bethesda, Maryland, at the Bethesda North Marriott. Save money by registering before the preregistration deadline of Thursday, 2 January.

HPS has arranged for a special rate of \$189 a night at the [North Bethesda Marriott](#). For more information about the meeting, please visit the [official meeting website](#).

The meeting schedule will be online within the next two weeks.

For more information contact the HPS Secretariat at 703-790-1745 or hps@burkinc.com.

Last-Minute Tips

Local Arrangements Committee

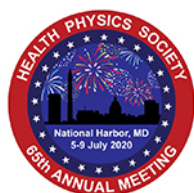
The Health Physics Society (HPS) Local Arrangements Committee (LAC) is excited to see you in Bethesda, Maryland, for the [53rd Midyear Meeting of the HPS](#), 26–29 January 2019. We thought it timely to provide a few last-minute tips before the meeting.

[Return to Table of Contents](#)

The location of the meeting, the Marriott North Bethesda, is surrounded by plenty of things to do. There are many restaurants and pubs within a 5- to 10-minute walk. The area referred to as "Pike and Rose" is a big hit. The no-host night out at Pinstripes is located in this venue complex. There is also a parking garage, and Uber services the area. If you don't feel there is enough for you to do in this area, you can take the red line south to Bethesda downtown or even farther south into Washington, DC, and Virginia.

- Technical Tours: please note [in the registration information](#) that the technical tours are as follows:
 - Monday afternoon, 27 January: Armed Forces Radiobiology Research Institute (AFRRI)—This is available for US citizens only. The charge of \$30 is for transportation to and from AFRRI, about a 20- to 30-minute drive from the conference hotel. Once registered, you will be contacted on detailed logistics by mid-January.
 - Tuesday afternoon, 28 January: US Nuclear Regulatory Commission (NRC), Emergency Operations Center (EOC)—There is no charge for this tour, as the EOC is located directly across the street from the hotel. We will assemble in groups and proceed by foot to the EOC. Once registered, you will be contacted on detailed logistics by mid-January.
- Night Out: the night out is Tuesday, 28 January, at [Pinstripes](#), a unique bowling and dining experience. This is a no-host event—HPS will make a reservation on behalf of the people attending. The cost will be \$30 and will include two hours of bowling and rental shoes. Food and beverages must be purchased separately. Several members of the LAC plan to attend and bowl into the evening—it's a fabulous experience.
- Transportation: Many of us locals of the Washington, DC, metro area rely heavily on the Metro. And for the midyear meeting you are in luck! The hotel is a 5-minute walk from the White-Flint metro stop on the red line. One of my favorite apps is "[DC Metro and Bus](#)"—you can navigate the app and determine how to get anywhere on the metro, whether it be to Bethesda downtown area or all the way south to the National Mall, Smithsonian Institutes, or DCA. (It's only 20–30 minutes by red line to the National Mall.)
- If you are arriving early or staying late (the weekend before or after), please refer to the [conference hotel website](#) for things to do around the immediate area. In the winter, we have found that walking the National Mall in the evening is spectacular, followed by a nice (but busy) dinner at Old Ebbitt Grill—a nice way to finish off a day in the District.

LAC member Jeff Kowalczyk suggested we also look at the end pages of the last NRC [RAMP \(Radiation Protection Computer Code Analysis and Maintenance Program\) meeting program](#), for a list of things to do and places to go in the DC area.



2020 HPS Annual Meeting

The [65th Annual Meeting of the Health Physics Society](#) will be held 5–9 July in National Harbor, Maryland.

2020 HPS Annual Meeting Call for Abstracts

Deadline: 24 January 2020

The [65th Annual Meeting of the Health Physics Society](#) (HPS) will be held in National Harbor, Maryland, 5–9 July 2020. National Harbor is located on the banks of the Potomac River just minutes from the Washington, DC, metropolitan area. It is known for its great shopping, trendy restaurants, waterfront

[Return to Table of Contents](#)

resort space, and the iconic Capital Wheel, making it a destination like no other. The annual meeting will be another great one and you can be a part of what makes it that way. We are putting out the call for papers in the full spectrum of radiation protection specialties. Everyone is welcome to come and share their work, their research, and their experiences, which is what makes the meeting worthwhile every year.

Please submit your abstract (including special session abstracts) [through the HPS website](#). In addition, we still have openings for a few more special sessions. If there is a special topic that you want to get in front of the health physics community, a special session is a great way to introduce it and initiate scientific dialog with your peers. For more information, please contact [Zach Tribbett](#), the 2020 Program Committee representative for special session coordination.

The Program Committee will meet 20–22 February to plan the 2020 HPS Annual Meeting. We will meet face to face to place submitted papers into the appropriate sessions, organize the various sessions into rooms and time slots, and coordinate with the AV people on layout and room size, etc. BEFORE we can do this, the Program Committee must REVIEW all abstracts, so please submit your abstracts by **24 January 2020** to give us ample time to review them in preparation for our planning meeting.

Special Announcement—Early Submissions Rewards Program: This year we are trying a new approach to encourage meeting presenters to submit by the deadline (24 January 2020). The Program Committee will award five \$100 registration discounts for abstracts submitted by the 24 January deadline. To be eligible, the following criteria must be met:

- Abstract must be accepted by the Program Committee at the planning meeting.
- ONLY abstracts submitted for the general sessions will be eligible (special sessions are not eligible).
- Posters are not eligible.

The Program Committee will hold a drawing at the end of the planning meeting and the five winners will be announced in *Health Physics News* following the planning meeting.

For more information and to submit your abstract online go to [the abstract website](#). Only abstracts submitted via this portal will be accepted.

2020 HPS Annual Meeting: Be Part of the Future

Mike Mahathy, HPS Director

In the last newsletter I wrote about engaging presentations and revised meeting guidelines. You told us you would like to be better engaged during our meetings and that some presentations seem stale.

At the [2020 Health Physics Society Annual Meeting](#) at National Harbor, Dan Sowers and I will host a special session to spotlight our new meeting guidelines. For the first time we welcome presentations that incorporate interactive pooling along with question-and-answer features. You can also use links (sound still not supported). However, presentations are not required to use those features; they need only to follow the guidelines for Powerpoint slides that keep your audience engaged as you speak.

Would you like to be a part of the official launch of our Society's future meeting success? We seek presentations on any health physics topic. If you would like more information, please contact [Mike](#) or [Dan](#). The [official call for abstracts](#) has been posted and the deadline is 24 January.

[Return to Table of Contents](#)

Preparing for the 65th Annual Meeting of the HPS

Local Arrangements Committee

We know some of you are grimacing, perhaps just a little, that the [65th Annual Meeting of the Health Physics Society](#) (HPS) is being held over the Independence Day weekend. Well, from those of us who live here, we can say, unequivocally, that there is no better place to be for the fireworks, music, bands, concerts, and tours than our Nation's Capital.

The [Gaylord Hotel](#) (a Marriott property), site of the meeting, is a truly spectacular venue. While we all wish it was a little bit closer to the National Mall, it takes only a 30-minute taxi or shuttle ride to get to the Mall and a 10-minute ride to Old-Town Alexandria, on the other side of the Potomac River. Use Google Maps to check out the area adjacent to the hotel: Tanger Outlets, MGM Grand, carousel, Ferris wheel, water taxis, Air Force 1, and plenty of places to shop and dine.

A few technical tours are being planned by the LAC, and we are revisiting whether to bring back the Pub Crawl and the Night Out. Look for a premeeting survey to determine level of interest for these events.

The shirts have been designed and are in the process of being ordered. We think everyone who attends will want one, with many symbols of our Nation's Capital proudly embroidered on the patch.

Look for more details in next month's newsletter. In the meantime, we believe it would be a great start to book your room at the Gaylord before the block of rooms is full. Make sure to use the [link from the website](#), which will ensure the rate negotiated with the hotel.

COMMITTEE NEWS

Membership Committee

Kendall Berry, HPS Director

The Membership Committee requests your help. We are looking for feedback from national and local Health Physics Society (HPS) members on why they value being a member of the HPS and what they would like to see improved. The Society seeks to better understand its existing membership so it can improve initiatives to retain and attract members. Please complete the [membership survey](#) by 20 December 2019. Thank you for your time and participation.

CHAPTER NEWS

Columbia Chapter



Brett Rosenberg, Chapter Newsletter Editor

Greetings from the [Columbia Chapter of the Health Physics Society \(CCHPS\)](#), and Happy Holidays!

The CCHPS is holding its holiday party at the home of Herbert M. Parker, a pioneer in the fields of medical physics and radiation safety. We are excited to be collaborating with the current homeowners, who continue to contribute to the medical industry and the local community. For more information, please [visit our website](#) and check out our events.

[Return to Table of Contents](#)

Speaking of holidays, Ron Kathren, past president of the HPS and the American Academy of Health Physics, is giving away a complete 50-year set of *Health Physics* journals! Free to a good home—please call Ron at 509-375-3316 or [send him an email](#).

The CCHPS remains involved with the Herbert M. Parker Foundation (HMPF), which hosts speakers every month. HPS Fellow and National Council on Radiation Protection Scientific Vice President Bruce Napier gave a thorough and elucidating talk in October on the dose-reconstruction efforts for workers and populations living along the Techa River in Russia. We are also planning a joint symposium with the HMPF.

Our technical meetings continue to host renowned speakers. In October, HPS Director Dr. Tim Taulbee presented "Personnel Monitoring Lessons Learned—A Dose Reconstruction Perspective." In November, Dr. Jonathan Burnett presented "Exploring the Gamma Landscape: The Future of Low-Level Gamma Spectrometry." Senior Technical Advisor Tim Lynch of the Hanford In Vivo Monitoring Program will describe the great work that was conducted at the In Vivo Radiobioassay and Research Facility in January—a talk and tour that are a must-see!

New England Chapter

Andrew Najjar, Chapter President



The [New England Chapter of the Health Physics Society \(NECHPS\)](#) congratulates Clay French and Bernie Olsen on their new status as emeritus members.

The NECHPS will be hosting the annual Holiday Vendor Social on 22 January 2020 at The Manor in West Boylston, Massachusetts. Please RSVP by paying online [at the chapter's website](#) or [by email](#).

For a list of events in 2020, please [visit our website](#)!

Baltimore-Washington Chapter

BWCHPS Executive Committee



The [December newsletter](#) of the [Baltimore-Washington Chapter](#) of the Health Physics Society (BWCHPS) is now available. See the membership section to learn more about the new recruitment incentive.

Upcoming Events

- [Registration is open](#) for the [Technical Dinner Meeting](#) on 11 December.
- The BWCHPS Certification Review Course will begin on 22 January 2020. See [the newsletter](#) for more information.

HEALTH PHYSICS JOURNAL/ORS NEWS



The Common Denominator: January *Health Physics* Journal

Brant Ulsh, CHP, PhD, Health Physics Editor in Chief

What does almost every study of radiation effects, whether it is a biological or epidemiological study, have in common? The need to accurately assess radiation doses received by the study subjects. This is usually easier in biological studies performed in a laboratory under controlled conditions, but far more challenging in epidemiological studies.

The [January 2020 issue of *Health Physics*](#) takes this challenge head on. Dr. Vladimir Drozdovitch and his colleagues consider thyroid doses in their paper "[Estimation of Radiation Doses for a Case-Control Study of Thyroid Cancer Among Ukrainian Chernobyl Cleanup Workers](#)." Eunjoo Kim and colleagues conducted a "[Reassessment of Thyroid Internal Doses of 1,080 Children Examined in a Screening Survey After the 2011 Fukushima Nuclear Disaster](#)," and Joshua Hayes and colleagues report on "[Effective Half Life Of \$^{134}\text{Cs}\$ And \$^{137}\text{Cs}\$ In Fukushima Prefecture When Compared to Theoretical Decay Models](#)." All of these papers consider the denominator in the risk/dose calculation, but we don't ignore the numerator. The important "[Position Statement of the Health Physics Society PS010-4: Radiation Risk in Perspective](#)" is also published in the January issue.

You won't want to miss these heavy-hitting papers to start the new year!

ABHP PART II Q&A PAGE

Problem 13: Internal Dosimetry and Instrumentation for Positron Emitters

Deepesh Poudel, CHP, PhD, Los Alamos National Laboratory

Eric Krage, CHP, PhD, Naval Nuclear Laboratory

[Problem 13](#) tests your knowledge on the effective removal of a radioactive gas due to ventilation and radioactive decay. In addition, it also tests your understanding of the use of derived air concentrations (DACs) and asks about proper instrumentation for measuring of positron emitters, without the interference from radionuclides typically encountered in a university environment. This problem appeared on 2002 examination of ABHP Part II as Problem 10. [The solution to Problem 13](#)—written with guidance from Thomas Johnson, CHP, PhD—is also available. Johnson is a professor at Colorado State University and has nearly three decades of experience in the nuclear industry.

Please refer to the [ABHP Part II Exam Practice Questions and Answers page](#) of the Health Physics Society website for more information and links to the question and answer books.

As always, [we welcome suggestions](#) (and potential questions) from students, CHP candidates, professionals, certified health physicists, trainers, and the ABHP itself.

CAN WE TALK?

No. 5 – How Can HPs Learn to Deal With Feelings?

Ray Johnson, CHP

Based on over 4,000 profiles for people engaged in radiation safety (according to the Myers-Briggs Type Indicator), more than 70% prefer to make decisions and communicate based on "**Thinking**" or logical analysis. Less than 30% would naturally use "**Feeling**" as a basis for decisions and communication. In contrast, 50% or more of the general public would prefer **Feeling** for making decisions, especially decisions that involve safety. This means that when many health physicists use their best logical analysis for dealing with someone frightened about radiation, they may find their communications fail. This is partly because the differences between **Thinking** and **Feeling** involve differences in lifestyle, vocabulary (the same words may carry different meanings), culture, outlook on the world (world view), and expectations. As noted previously (see column No. 2 in the [September 2019 issue of Health Physics News](#)), those who prefer **Thinking** can begin to relate to the **Feeling** world by active listening (hearing the feelings, mad, sad, glad, or afraid). However, the process of active listening can be deceptively simple.

To paraphrase and reflect perceived feelings (emotions) might seem relatively easy. However, the process of active listening can become very difficult when suddenly confronted by strong feelings of anger or criticism, for example. Even after 40 years of practice, I can still be caught off guard and fail to follow the process. I must almost literally reach into my mind and flip a switch in order to hear the feelings. When confronted before I have time to flip the switch, I will often respond in my traditional logical, analytical, unfeeling way.

Why is it so hard to learn to communicate in the world of feelings?

For many people, the word "radiation" automatically conveys a sense of fear for dangers to be avoided. Fearful people may want emotional assurance and responses in the language of **Feeling**. Such responses may be difficult for **Thinking** types because it means communicating in a way that is different from what has been developed by practice over an entire lifetime. Therefore, switching from **Thinking** to **Feeling** requires a considerable commitment of energy, and we are programmed to conserve energy. The reason it can be so difficult to switch is because the way we have communicated our entire lifetime is a habit. All of you know how hard it can be to change a habit.

Can we change our thinking communication habit?

The answer can be "YES" if we are willing to make several decisions. First, we must decide to make the change. This may be a relatively easy decision. However, a much harder decision is to commit the time and energy to practice communication in the **Feeling** language until it becomes a new habit. This process may require several months of dedicated practice. Can we motivate ourselves to do this in addition to other demands on our time? I would suggest that while learning to deal with feelings can be very helpful for dealing with someone frightened by radiation, those same skills can also be very significant in relations with family members, friends, and coworkers. This is the world of emotional intelligence described previously (see column No.4 in the [November 2019 issue of Health Physics News](#)). For some, the best opportunity to learn the feeling language is to partner with several others for supervision and encouragement. A support group can provide frequent accountability and guidance for staying on track.

HPS MEMBERS IN THE NEWS

HPS Members Appointed to Texas Radiation Advisory Board

Governor Greg Abbott appointed **William "Will" Pate, DrPH, CHP**, of League City, Texas, to the Texas Radiation Advisory Board. Dr. Pate is the radiation safety officer (RSO) for the University of Texas (UT) Medical Branch at Galveston. He is secretary of the State of Texas Chapter of the Health Physics Society (HPS) and previously served as president. He is a professional member of the American Society for Healthcare Engineers, a member of the HPS and the NFPA Laser Fire Protection Technical Committee, and a plenary member of the American Academy of Health Physics (AAHP). Additionally, he is vice chair of the UT System Radiation Safety Advisory Group and a member of the Laser Subcommittee of the American National Standards Institute. He is a certified health physicist and a licensed medical physicist specializing in medical health physics. Pate received a bachelor of science in biology from UT San Antonio, a doctor of public health in environmental and occupational health from UT Health Science Center at Houston, and a master of business administration from Texas A&M Corpus Christi. Pate will serve on the Radiation Advisory Board until April 2023.

Governor Greg Abbott reappointed **John P. Hageman, MS, CHP** of San Antonio, Texas. Hageman is a radiation safety consultant for Southwest Research Institute and served as the institute's RSO for 20 years. He is a member of the AAHP and is a past treasurer and fellow of the HPS. Additionally, he is the treasurer of the Bexar County Local Emergency Planning Committee. Hageman received a bachelor of science in physics from UT Arlington and a master of science in radiological health from UT Health Science Center at San Antonio. Hageman has served as the president of the South Texas Chapter of the HPS, now the State of Texas Chapter, and is editor of *The Billet*, chapter's newsletter. John has served on the Radiation Advisory Board since 2008 and is the board's chairman; his term will expire in April 2023.

HPS STANDARDS CORNER

US and HPS Participation in International Technical Standards Part 1: What Is International Standardization and Why Is It Important?

Jim F. Herrold, CHP, RRPT¹

The International Organization for Standardization (ISO) is a voluntary, independent consortium of national standards bodies, including the American National Standards Institute (ANSI). ISO standards "help companies to access new markets, level the playing field for developing countries and facilitate free and fair global trade."²

ISO Technical Committee 85 (TC 85) covers "nuclear energy, nuclear technologies, and radiological protection." Subcommittee 2 (ISO/TC85/SC2) focuses on the radiological protection standards (Table 1). The [Health Physics Society Standards Committee](#) (HPSSC) is the Health Physics Society (HPS) organizational representative to the SC 2 Technical Advisory Group (TAG).

The SC 2 TAG establishes US consensus, submits ballots (through ANSI), and promotes expert participation in ISO TC 85/SC 2 working groups (Table 2) that perform the tasks of writing, editing, and ushering ISO standards through the steps of development.

[Return to Table of Contents](#)

Table 1. ISO Technical Committee 85/Subcommittee 2 statistics for 2018

310	Number of registered experts worldwide in ISO/TC 85/SC2 activities
27	Participating countries, along with 8 observing countries and 12 liaisons
51	Experts representing the United States (ANSI) and their stakeholders
102 ³	Published standards in the SC2 portfolio (13 were added since June 2018)

Table 2. ISO Technical Committee 85/Subcommittee 2 working groups

WG #	Working Group Title
WG 2	Reference radiations fields
WG 11	Sealed sources
WG 13	Monitoring and dosimetry for internal exposure
WG 14	Air control and monitoring
WG 17	Radioactivity measurements
WG 18	Biological dosimetry
WG 19	Individual monitoring of external radiation
WG 21	Dosimetry for exposures to cosmic radiation in civilian aircraft
WG 22	Dosimetry and related protocols in medical applications of ionizing radiation
WG 23	Shielding and confinement systems for protection against ionizing radiation
WG 25	Radiation monitoring of population and responders in nuclear/radiological emergencies

There currently are 51 experts from the United States in SC 2 working groups, 30 of whom belong to the HPS. Although WG experts are appointed through the TAG and ANSI, they act in the capacity of their stakeholder groups. A description of the committee structure can be found on the [ISO website](#). ISO working groups meet electronically and in person. Every year ISO/TC 85/SC 2 holds a plenary meeting and convenes working groups, advisory groups, and other committees.

In May 2019, ISO/TC 85/SC 2 met in Okayama, Japan. The meeting was attended by 105 delegates, representing 10 countries. Six delegates attended from the United States: Jim Herrold (head of US Delegation, WG25), Matthew Barnett (convenor of WG 14), Gus Potter (WG 13, WG 25), Melissa Martin (WG 23), and Gary Hodgden and Michael LaFontaine (both WG 17). The next scheduled meeting of SC 2 will be 25–29 May 2020, in Hangzhou, China, in conjunction with ISO/TC85.

If you are interested in learning more about ISO radiation protection standardization and working groups, contact US TAG Chair for ISO TC 85/SC 2 [Jim Herrold](#) or HPSSC Chair [Antonio Triventi](#).

¹ University of Wyoming, Chair, United States Technical Advisory Group (TAG) ISO/TC85/SC 2

² <https://www.iso.org/>

³ For the full catalogue of ISO/TC 85/SC 2 standards, see

<https://www.iso.org/contents/data/committee/05/02/50280/x/catalogue/>

US and HPS Participation in International Technical Standards Part 2: The ISO Standards Development and Review Process

Jim F. Herrold, CHP, RRPT¹

The American National Standards Institute (ANSI) is the US representative of the International Organization for Standardization (ISO). Through ANSI, the US participates in technical committees (TC) and subcommittees (SC) that develop, reaffirm, and revise ISO standards. [ISO Technical Committee 85](#) (TC 85) has the scope of nuclear energy, nuclear technologies, and radiological protection. ASTM International administers the technical advisory group (TAG) for TC 85. TC 85, Subcommittee 2 (SC 2) is responsible for standards relating to radiological protection. As the world's largest professional organization of radiation safety/protection specialists, the Health Physics Society (HPS) is the organizational sponsor for HPS membership in the ISO/TC 85/SC 2 TAG.

How are new ISO standards developed?

ISO standards are written according to established ISO directives and follow a requisite schedule of development and review. When a new standard is proposed, a new work proposal (NP) is distributed to participating (or P-member) countries for ballot. If approved, the new project is assigned to a working group (WG). Successive committee drafts (CD) can be circulated for ballot until consensus is reached. Eventually a draft international standard (DIS) is distributed to all ISO members, who have three months to vote and provide comments. The DIS is approved for publication by a two-thirds vote. However, if the draft was significantly revised at the DIS stage, a final draft ISO standard (FDIS) is circulated for another two-month vote. The total process from NP to publication must be completed in the shortest timeframe possible; items that have been on the work program for more than five years are cancelled.

For ISO standards to remain relevant, every five years they must undergo a systematic review in which national experts review the document and vote whether it should be updated or withdrawn. If five countries use the standard, but a simple majority of the P-members request revision, it goes back to a working group and the balloting process described above.

In 2018, TC 85/SC 2 distributed 54 ballots for review or revision of radiation protection standards. At every step in ISO standard development, participating countries must vote to approve, disapprove (with or without comments), or abstain. Every country gets one vote, but they can lose their P-member status if they fail to respond to even a single ballot.

Participating in ISO standard working groups and reviews has many benefits. Certified health physicists can get American Academy of Health Physics recertification points for ISO participation. As a reviewer or member of a working group, you can help ANSI advocate US policy and technical positions in international standards organizations and shape future international standardization.

If you are interested in learning more about ISO radiation protection standardization and working groups, contact US TAG Chair for ISO TC 85/SC 2 [Jim Herrold](#) or HPSSC Chairman [Antonio Triventi](#).

¹ University of Wyoming, Chair, United States Technical Advisory Group (TAG) ISO/TC85/SC 2

ANSI/HPS N13 Annual Business Meeting

J. Matthew Barnett



Left to right, Antonio Triventi (HPS), David Fuehne (Environmental Section manager), Cindy Flannery (US Nuclear Regulatory Commission), Matthew Barnett (N13 chair), Jonathon Walsh (US Environmental Protection Agency), Nancy Johnson (standards coordinator), Charles "Gus" Potter (vice chair). Photo courtesy of Matthew Barnett

The ANSI/HPS N13, Radiation Protection, annual business meeting was held in Washington, DC, 24 October 2019 at the Los Alamos National Laboratory DC office. During the year, five standards were reaffirmed (standards in pdf format are available on the Health Physics Society (HPS) Members Only website); three new section managers were welcomed, including Sandy Hyman (Internal Dosimetry), Gladys Klemic (External Dosimetry), and Peter Caracappa (Instrumentation); and new work group chairs and members were approved. Overall ballot participation remained greater than 80%. After the meeting, a few individuals remained for a photo opportunity.

A revised N13 Internal Operating Procedure was issued in May. The primary change was setting forth a

review cycle prior to a standard going to an approval ballot. This change was implemented to help address potential issues that could arise and result in a negative ballot. We are looking forward to implementing the new process in the coming year.

N13 members discussed future opportunities to solicit participation in the standards development process. The standards committees are working together to hold a special session at this year's HPS annual meeting, and N13 is looking at the possibility of having booth space in the vendor area. Anyone interested in participating on N13 standard can contact [Matthew Barnett](#).

WHAT'S NEWS?

NCRP Publishes Reports No. 183 and No. 184

The National Council on Radiation Protection and Measurements (NCRP) is proud to announce the publication of Report No. 183 and Report No. 184.

[Report No. 183: Radiation Exposures in Space and the Potential for Central Nervous System Effects: Phase II](#) summarizes the steps and approaches needed to more fully understand the risk of central nervous system effects in humans following radiation exposures in space and provides guidance for radiation protection, including risk management, by addressing eight key questions. Understanding this topic is essential to continued exploration of space.

Report No. 183 was prepared by experts from a number of fields including biology, physics, radiation dosimetry, behavioral neuroscience, molecular and genetic toxicology, and others, providing a comprehensive evaluation of our understanding of radiation effects of space travel. Anyone who is

[Return to Table of Contents](#)

affiliated with or has an interest in space travel should read this report to get the latest information available about potential effects on the central nervous system from exposure to radiation in space.

The [Publication Overview for Report No. 183](#) is available on the NCRP website.

[NCRP Report No. 184: Medical Radiation Exposure of Patients in the United States](#), is an update to NCRP Report No. 160: *Ionizing Radiation Exposure of the Population of the United States (2009)*. This new report updates medical radiation exposure information with data collected between 2006 and 2016.

The audience for this Report is primarily federal and state agencies responsible for the health and well-being of individuals exposed to ionizing radiation and those agencies with responsibility for ensuring radiation protection safety in medicine. NCRP Report No. 184 includes useful information for health physicists, medical physicists, physicians and other medical professionals, radiation safety officers, managers, workers, members of the public, and the media.

The [Publication Overview for Report No. 184](#) is available on the NCRP website.

December CHP Corner

While the *CHP Corner* is produced by the American Academy of Health Physics (AAHP), it is relevant to all health physicists, not just those who are certified!

The [December 2019 issue of the CHP Corner](#) has been posted to the [AAHP website](#). This edition includes:

- American Board of Health Physics exam results . . . 48 new CHPs!
- American Board of Health Physics exam application reminder.

DECEMBER 2019 SHORT COURSE LISTINGS



Packaging and Shipping Class 7 (Radioactive) Material

Plexus Scientific Corporation. Attn: Sean M. Austin, CHP, 7130 Minstrel Way, Suite L130, Columbia, MD 21045; phone: 443-979-7231; fax: 443-319-8056; email: nsd@plexsci.com. For course listings please visit our website: <http://www.plexsci.com>, Lines of Business/Nuclear Solutions/Services/Training.

US Department of Transportation (DOT) regulations require initial and recurrent training of all employees who perform work functions covered by the Hazardous Materials Regulations. Any employee whose work directly affects hazardous materials transportation safety is required to have training. This course is intended for people involved in packaging and shipping Class 7 (radioactive) material. These materials pose a hazard to people and the environment because they emit ionizing radiation. Our course will help meet DOT regulations as specified in 49 CFR 172 Subpart H. We also review transportation regulatory requirements of agencies such as the US Nuclear Regulatory Commission and various Agreement States that regulate the use of certain types of radioactive material in research, medicine, manufacturing, construction, and other industries. In addition, this course is helpful to organizations shipping naturally occurring radioactive material (NORM) and technologically enhanced NORM (TENORM). Testing is included because it is required by the DOT. Upon passing the test, students will receive a certificate of completion. The certificate, along with the training materials and employer certification, are used to document compliance with training regulations. Topics covered include determination of proper packaging (Type A, Type B, Excepted, and Industrial), conducting radiation surveys on packages, labeling, marking, shipping papers, placarding, emergency response, security awareness, excepted package shipments, low specific activity (LSA), and surface-contaminated objects (SCO) shipments. This course does not cover packaging and shipment of fissile material or design of Type B or fissile packages. This course is delivered via webinar over three days. Each day includes one 2.5- to 3-hour session. This course requires a minimum number of seven registrants in order to hold the class. This training may be delivered at your facility and designed to meet your needs. Courses are customizable and tailored to review information pertinent to you and your staff concerning packaging and shipping radioactive material. Contact us for additional information.

DATES:

10–12 December 2019 (webinar); registration deadline 2 December 2019
17–19 March 2020 (webinar); registration deadline 2 March 2020
23–25 June 2020 (webinar); registration deadline 8 June 2020
22–24 September 2020 (webinar); registration deadline 7 September 2020
15–17 December 2020 (webinar); registration deadline 1 December 2020

FEE: \$297

PLACE: Webinar



Certification Review Course Part I; Self Study Course Part I; Background Materials Review; Part I Question & Answer CD and Site License; Part I Additional Question & Answer Volume; NRRPT Question & Answer CD and Site License

Bevelacqua Resources. Attn: Dr. Joseph J. Bevelacqua, PhD, CHP, RRPT, 343 Adair Drive, Richland, WA 99352; phone: 509-628-2240 or 509-521-8036; email: bevelresou@aol.com; website: <http://www.bevelacquaresources.com/>.

[Return to Table of Contents](#)

This course and supporting materials prepare candidates for the successful completion of the Part I American Board of Health Physics (ABHP) Certification Examination. Historically, our students have achieved passing rates that exceed the average exam passing rates. The Part I Course has been granted 40 AAHP CECs (2018-00-001). The instructor, Dr. Bevelacqua, was an ABHP Part II Panel member, vice-chairman, and chairman. His experience gained in developing the certification examination and knowledge of candidate weaknesses have strengthened the content of this course and supporting materials. Examination strategies and techniques for successfully passing the examination are emphasized. **Part I Course:** The Part I Course is intense, with lectures followed by problem sessions. An exam-specific mathematical review is included with the course. About 30 percent of the course is devoted to problem solving with instructor critique and guidance provided to each student. The Part I Course materials include the Part I Self-Study Course materials. Class times are 8:15 am–5 pm each day. The Part I Self-Study Course contains 1,600+ problems with solutions, the textbook *Basic Health Physics*, detailed course notes, examination preparation materials, and a summary of recent (1997–present) NCRP reports. In addition to the materials used in the Part I Course, supporting materials (Background Materials Review, Additional Q&A Volume, and Part I CD) are available to assist a student's certification preparation. **FOREIGN STUDENT ADVISORY:** The course language is English. Translation services are not provided.

DATES: 30 March–3 April 2020

FEES (*): \$3,600 (Part I Course)

\$3,050 (Part I Self-Study Course)

\$2,400 (Part I CD with 1,500+ Questions and Answers)

\$2,400 (NRRPT CD with 1,500+ Questions and Answers)

Site Licenses are available for both CDs—License fee prices are available on request.

\$2,600 (Background Materials Review)

\$2,600 (Part I Additional Q&A Volume)

Foreign shipping and handling depends on the destination country.

*Given pending changes to federal and state tax structures, fees are subject to change. All credit card purchases incur a 4 percent surcharge. Foreign purchases are subject to additional fees.

REFUND POLICY: Based on local, state, and federal accounting requirements, no inventory is maintained. Given these restrictions, no refunds are available after an order is processed.

PLACE: Red Lion Hotel Columbia Center-Kennewick, 1101 N. Columbia Center Blvd, Kennewick, WA 99336; 509-783-0611

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Radiation Safety Officer Training Class



Radiation Safety & Control Services, Inc. Attn: Natalie Tarzia,
93 Ledge Road, Seabrook, NH 03874; phone: 800-525-8339 or
603-778-2871 (x220); fax: 603-474-1531; email:
nmtarzia@radsafety.com; website: radsafety.com

This comprehensive 40-hour course provides students with a balance of technical and theoretical information along with practical applications of radiation safety. Fundamental concepts are presented in a logical progression, providing a sound basis for understanding the day-to-day requirements of the radiation safety officer (RSO). This training includes Department of Transportation (DOT) requirements for transportation of radioactive materials and satisfies the requirements of Subpart H. A DOT exam is included. References from past students are available upon request. The three instructors of the course are certified health physicists with a combined 100 years of experience in their field. As RSCS principals, they operate a

[Return to Table of Contents](#)

nuclear instrumentation calibration facility and an analytical measurement laboratory and also perform consulting for radioactive material licensees. Continuing education credits (CECs) have been approved by the American Academy of Health Physics (40 CECs) and the American Society of Radiologic Technologists (40 hours of Category A CECs).

DATES: 15–20 March 2020

FEE: \$1,495 (includes all materials, daily continental breakfast and snack breaks, and a catered lunch and social on the first day of the course)

PLACE: Wyndham Garden, Lake Buena Hotel, Orlando, Florida

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Facility Decommissioning Training Course

Argonne National Laboratory (ANL). Lawrence E. (Larry) Boing, Training Course Director, Argonne National Laboratory, EOF Division, 9700 South Cass Avenue, Argonne, IL 60439; phone: 630-252-6729; fax: 630-252-7577; email: lboing@anl.gov. Additional details are available on our website: www.dd.anl.gov/ddtraining/.

Our credentials include over 40 years of performing and/or managing the decommissioning of our own diverse range of radiological and other operator/licensee nuclear facilities. In the process, we have developed a broad base of knowledge and expertise in this field. We have coupled this to our thorough understanding of the various aspects of the decommissioning field, both domestically and internationally, plus our broad network of supporting staff in the industry, and this is what we have in the end. We have developed a training program with an end objective of consolidating that collective industry experience and knowledge into a complete set of packaged, topical modules in a format to help others understand the entire decommissioning process and to facilitate the optimization of their project work. To accomplish that objective, we use a team of established and seasoned subject-matter experts respected for their work in their fields to present both "standard" modules and "case study" modules. At some sessions we are able to include a fourth day—typically of a relevant site or project—as work schedules, locations, and other requirements allow. Exhibitor space is available for vendors and for others interested in presenting displays at our training sessions. There are ample opportunities available to network with colleagues as well. [Our website has full details](#) on all of our decommissioning experience and upcoming sessions. We look forward to seeing you at one of our upcoming training courses. If you have questions, please do not hesitate to contact us. For the latest news on all of our training course locations and dates, please visit our website.


DATES: Exact dates and locations—see our website for the latest training news.

FEE: \$1,595

PLACES: Las Vegas, Nevada, in the November and March time frame; other locations as well—see website for full details and news.

Advertising in *Health Physics News*

If you are interested in advertising your company and its short courses, events, or products in *Health Physics News*, see the [advertising page on the HPS website](#).

 Dade Moeller Training Academy	<ul style="list-style-type: none"> • Radiation Safety Officer (RSO) • Medical RSO (MRSO) 	<ul style="list-style-type: none"> • Department of Transportation (DOT Certification) • Naturally Occurring Radioactive Materials (NORM)
	1-800-871-7930 2018 Schedule & Catalog www.dademoeller.com/training	

Technical Management Services  www.tmscourses.com	 <h2 style="text-align: center;">Radiological Training</h2> <p style="text-align: center;"><i>Rad Protection • Instrumentation • NRRPT Preparation and more ...</i></p> <p style="text-align: center; color: red;">Open Enrollment and Customized Onsite Training</p>	
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 LUDLUM MEASUREMENTS, INC. 501 Oak St. Sweetwater, TX 79556 800-622-0828 325-235-5494 sales@ludlums.com	<h3 style="text-align: center;">The Model 30-7B</h3> <h4 style="text-align: center;">Our Lightest Digital Neutron Survey Meter</h4> <ul style="list-style-type: none"> • 19.5 cm (7.7 in.) REM Ball • Provides Same Readings as Standard REM-Ball • Digital Display with Adjustable Viewing Angle 	
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