Chapter News

North Central Chapter

Christopher L. Kessler, CHP, DABR®, and Michael A. Lewandowski, CHP

Spring Technical Meeting

Mayo Clinic hosted the North Central Chapter of the Health Physics Society (NCCHPS) spring technical meeting on 11 April 2014 in Rochester, Minnesota. The meeting was run by NCCHPS President-elect Glenn Sturchio, PhD, and included a joint morning plenary session with the North Central Chapter of the American Association of Physicists in Medicine; an NCCHPS afternoon technical program; a business meeting; vendor exhibits by Landauer, Inc., Mirion Technologies, and Canberra Industries, Inc.; and a tour of the Mayo Clinic proton beam therapy facility.

The joint plenary session consisted of five presentations. Jon Kruse, PhD, assistant professor of medical physics at Mayo Clinic, presented a history of proton therapy at Mayo Clinic and reviewed the new proton beam therapy facility currently being completed.

Andy Johnson, PhD, associate director at the Center for the Advancement of Math and Science Education at Black Hills State University, presented the challenges and opportunities in making radiation literacy possible. Johnson reviewed the Inquiry into Radioactivity (IiR) project. One purpose of the IiR project is to promote radiation literacy, and the project is developing and disseminating course materials for students in survey-level college physics and high school courses to understand ionizing radiation, its effects on health, and the connection to nuclear power.

Bruce Thomadsen, PhD, professor of medical physics and industrial and system engineering at the University of Wisconsin–Madison, reviewed the challenges facing the American Association of Physicists in Medicine Task Group No. 100 (TG 100). The report from TG 100 describes methods for evaluating quality-assurance needs in radiation therapy.

William Hendee

William Hendee, PhD, emeritus professor at the Medical College of Wisconsin, delivered the insightful presentation "The Transformation of Scientific Publishing and How It Will Impact Scientific Journals and Organizations." Hendee described two of the main challenges facing scientific journals today: (1) the transformation to electronic-only publications and its effect on advertising revenue and (2) the movement toward open-access publications and its effect on transferring the cost of publishing journals from the readers to the authors.

Paul Frame

Paul Frame, PhD, retired health physicist and former manager of the Professional Training Programs at Oak Ridge Associated Universities, presented the NCCHPS Wissink Memorial Lecture. The lectureship honors the contributions made to the chapter and the HPS by NCCHPS founding member Robert Wissink. Frame regaled the audience with three short stories: "The Legend of Emil Grubbe," "Carl Anderson and the Discovery of Antimatter," and "Origin of the Radiation Warning Sign."

Glen Sturchio

During the afternoon NCCHPS technical session, Glenn Sturchio, PhD, assistant professor at Mayo Clinic College of Medicine and Mayo Clinic radiation safety officer, asked the question, "Does your risk statement support informed consent?" The purpose of Sturchio's presentation was to engage the audience in thinking about informed consent and the appropriate level of risk to communicate to people

participating as subjects in human research trials. Sturchio noted that understanding was inversely related to the amount of information provided to research subjects.

A study being performed at South Dakota State University on the effects of radiation on polyethylene was presented by Robert McTaggert, PhD, associate professor of physics. Nuclear power plants are being licensed for longer operating lives. The effect of extended radiation dose to various components is an important area of study in the engineering for nuclear power plants.

The NCCHPS technical session concluded with a presentation by Jeffrey Brunette, MS, radiation safety manager at Mayo Clinic. Brunette reviewed the challenges and calculations involved with radioiodine therapy patients who travel significant distances following administration of the dosage and how Mayo Clinic is meeting regulatory compliance.

Eastern Tennessee Chapter

Cecelia Green, Secretary

On 22 February 2014, a Saturday-morning "back to school" set of lectures and discussions by the members of the Health Physics Society (HPS) and American Nuclear Society was held jointly with the University of Tennessee-Knoxville (UTK) student branch of the HPS. The auditorium was well suited for the class format and the event was well attended by members of the Eastern Tennessee Chapter of the HPS (ETCHPS) and UTK student branch alike, with 60 souls populating the venue. There were even a few non-ETCHPS members and high school students in attendance! This was an annual event in the past, and given its success, the "back to school" Saturday will resume as an annual winter event.

Topics included:

- Statistical Sampling Approaches for Radioactive Waste Disposal
- REAC/TS: Methods and Capability for Responding to World-Wide Radiation/Nuclear Incidents
- 10 CFR 835 Internal Audits of Radiation Protection Programs
- The World-Wide ^{99}Tc Shortage and the HEU to LEU Conversion in South Africa
- Recent Advancements in Transportation Security for Radioactive Material
- In the Blink of an Eye—Quick Look at Changes to Eye Dose Limits (more on this subject in the Boice Report in this newsletter)
- The Fukushima Accident
- Depleted Uranium—It's NOT JUST About Radiation!
- What You Can Learn From 2 Terabytes and 10 Years of Portal Monitors
- Responding to Radiation Incidents in Tennessee
- Intercomparison Between the Most Serious Nuclear Accidents: TMI, Chernobyl, Fukushima
- The Physics of Improving Patient Outcomes—Provision Center for Proton Therapy

The back to school event was awarded four continuing education credits by the Continuing Education Committee of the American Academy of Health Physics.

**To include your chapter news in the newsletter,
send a report (up to 500 words) to editormw@hps.org
by the 10th of the month to appear in the next month's issue of *Health Physics News*.**