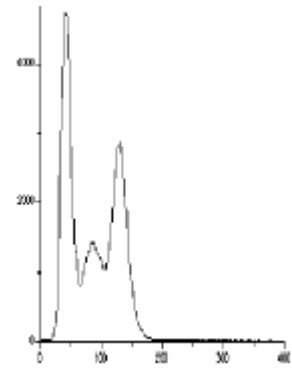




MIDWEST
CHAPTER

THE SPECTRUM

NEWSLETTER OF THE HEALTH PHYSICS
SOCIETY'S
MIDWEST CHAPTER
February 2008
www.midwesthps.org



Spring Meeting, March 19, 2008

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Affiliates

Canberra
Global Dosimetry Solutions
Image Technology
Landauer
Protean Instrument Corp.
Scientific Instrument Sales

New Nuclear Plant Development at Exelon

Thomas S. O'Neill
Vice President, New Plant Development
Exelon Nuclear



The news media have been heralding a nuclear renaissance in the United States. Evidence of this includes the recent announcement by Exelon Nuclear of a site in Texas for the construction of a new nuclear generating station. Exelon also announced the selection of a design for the plant.

Please join us at the Warrenville headquarters of Exelon Nuclear for a discussion concerning Exelon's plans with Mr. Thomas O'Neill, Vice President of New Plant Development at Exelon. We will also be touring the Exelon Nuclear Emergency Operations Facility (EOF).

(Continued on next page)

Don't miss it! First annual Midwest Health Physics Technical Symposium, Saturday, April 5. See flyer inside.

2008 Dues Are Due: The mailing label indicates the last year through which your dues are paid. If you haven't paid for 2008, please submit your renewal now along with the Membership Update Form inside.

(From previous page)

Mr. O'Neill is responsible for all new plant initiatives within Exelon Nuclear. In this role, he is the lead executive for the project to submit a Construction and Operating License (COL) to the U.S. Nuclear Regulatory Commission (NRC) for the site in Texas. The COL is the first step toward potential new nuclear construction and operation in the state but does not imply a commitment to build a plant.

Mr. O'Neill also leads the team that facilitates Exelon's involvement in the NuStart consortium of companies. The consortium objectives are: 1) to demonstrate the never-before-used NRC licensing process for obtaining a combined Construction and Operating License (COL) for an advanced nuclear power plant; and 2) complete the design engineering for two selected reactor technologies.

Previously, Mr. O'Neill served as Exelon Nuclear's Vice President of Regulatory Affairs. He led a 50-person organization responsible for federal and state nuclear and environmental regulatory activities on behalf of Exelon Nuclear's fleet of 10 stations located in Illinois, New Jersey and Pennsylvania.

Mr. O'Neill joined Exelon Nuclear in 2001 as lead counsel. Prior to joining Exelon, Mr. O'Neill was a partner with the law firm of Jenner & Block in Chicago, Illinois where he practiced civil and criminal litigation in the federal and state courts for a wide range of corporate and individual clients, with emphasis on complex commercial civil litigation.

Mr. O'Neill received his BA in English from the University of Illinois-Urbana (Honors with High Distinction) and is a graduate (Cum Laude) of the Notre Dame Law School.

President's Message

Spring Technical Symposium

The Chapter invites you to its first annual Midwest Health Physics Technical Symposium on Saturday, April 5, at Argonne National Laboratory. Details are in a flyer distributed with this newsletter.

The purpose of the symposium is to provide a forum for health physicists in the Midwest to meet and exchange expertise and experience. Many of us work in isolated facilities or specialized areas and do not know what our neighboring HPs down the hall or down the road are doing. By congregating periodically, we can learn from each other.

This year's symposium will cover radiological disaster response, health care radiation protection, the operations of the NCRP, running your own HP business, and more. We have tried to keep the cost low and have scheduled the event for a weekend day to overcome the financial and travel hurdles that our weekday dinner meetings pose. We have invited several vendors to display their wares in order to provide you access to the latest offerings in HP equipment and services. Whether you are a beginning technician or an experienced CHP, we believe you will find something of benefit in the program. Join us and invite your fellow HPs. Post our flyer or distribute it by e-mail (see the copy on our website, <http://www.midwesthps.org/>).

Gerald Davidson

Joining the Chapter

Membership in the Midwest Chapter will help you keep connected with the health physics community. We offer programs to help you meet and network with other health physicists and to keep abreast of developments and controversies in our field. For information on how to join and an application form, click on the Membership link on our website <http://www.midwesthps.org/>.

Membership Update Form

Do you remember when you joined the Chapter? Was it three jobs and two towns ago? Has your e-mail address changed? Much of the information in our member database has become stale. We would appreciate it if you would update the information we have for you by completing the form on page 5 and mailing it to Midwest Chapter Health Physics Society, P.O. Box 513, Westmont, IL 60559.

Midwest Health Physics Technical Symposium

Saturday, April 5, 2008, Argonne National Laboratory, Argonne, IL

Sponsored by Midwest Chapter of the Health Physics Society

Technical Presentations • Vendor Displays – including Landauer (dosimetry), Bionomics (radwaste disposal), DEQ Sales (representing Ludlum, Teletrix, Bladewerx, Shieldwerx) • Continental breakfast & box lunch provided • Open to Chapter members and non-members • CEU credits will be applied for
PRE-REGISTRATION IS REQUIRED by March 28 for citizens, earlier for non-citizens; see other side for details.

Presentations

Should a Social Security Number Be Required to Obtain a Radiation Badge?

Gary Zeman, Radiological Safety Officer, Argonne National Laboratory

Protection of personal privacy is becoming an increasing priority for individuals as well as institutions. The social security number has traditionally been used as a unique identifier to track and report occupational radiation exposure data for radiation workers. This talk will examine some of the uses and requirements for use of the SSN in radiation dosimetry recording and reporting and explore trends to use alternate personal identifiers.

Hospital Health Physics

David Derenzo, Radiation Safety Officer, Jesse Brown VA Medical Center

Administration of radioactive materials to patients for medical procedures poses radiological hazards to other patients, staff, and visitors. Residual radioactivity may cause exposure of the general public and family members, set off homeland security alarms, and interfere with a patient's return to work at a radiological facility. This presentation will discuss protective measures, release criteria, and other challenges faced by the hospital health physicist.

Health Physics at GE Healthcare

Mark Doruff, Global Nuclear Safety Manager, GE Healthcare

GE Healthcare is a global industry leader providing products and services to the medical and life science communities. This presentation will describe the portfolio of applications involving radioactive materials and radiation generating devices, the radiation protection program for the business, mechanisms and organization to ensure compliance and program performance, and the current and future internal and external challenges faced by this business and the industry.

Introduction of NCRP and Its Activities

S.Y. Chen, Strategic Area Manager in Risk & Waste Management, Environmental Science Div, Argonne Nat'l Lab

S.Y. Chen, a Board member and Scientific Vice President of the National Council on Radiation Protection and Measurements, will discuss its goals and operation. As the nation's highest advisory body on radiation protection matters, the Council seeks to formulate and widely disseminate information, guidance and recommendations which represent the consensus of leading scientific thinking on radiation protection and measurements.

Things I Learned Running a Radon Mitigation Business

Stephen Walker Butala, Accelerator Health Physicist, Argonne National Laboratory

The former owner of a radon mitigation service company will talk about his experience in running an HP-related small business for eighteen years, part-time. The topics to be presented include: how the business got started, how indoor radon levels are reduced, tools of the trade, finding and keeping good workers, marketing and customers, getting and remaining profitable, evolution of the radon industry, and ALARA effectiveness of radon mitigation.

Kerr McGee, West Chicago Factory Site Decommissioning & Superfund Sites

Stephen B. Shafer, Health Physicist, Radiological & Environmental Management, LLC

This presentation will discuss the cleanup of the Kerr-McGee Rare Earths Facility site in West Chicago, Illinois. The facility produced thorium and rare earth compounds from 1932 until 1973. Disposal of radioactive ore residues ("tailings") contaminated site soils and groundwater, off-site residences and two city-owned properties. The Illinois Emergency Management Agency regulates site remediation and the USEPA has authority over the cleanup of the off-site contamination under the Superfund Program.

Californium-252 Shielding Cask Design

Sam Baker, Radiological Safety Services Manager, Argonne National Laboratory

The Californium Rare Ion Breeder Uppgrade (CARIBU) project at the Argonne ATLAS accelerator will provide a fission fragment ion source for studies of neutron-rich nuclei. The ions will come from a 1 Ci Cf-252 source. This presentation will describe a novel shielding cask developed to allow safe on-site transport, storage and use of the source. The cask reduces the source neutron dose rate from 46 rem/hour at 30 cm to 0.001 rem/hr.

Sensitivity of Low Level Instrumentation

Leland H. Sprouse, Jr., Senior Health Physics Technician, Argonne National Laboratory

Knowing the sensitivity of low level instrumentation is important in contamination detection and release assessment. This presentation will discuss the minimum levels of activity and detection efficiencies for various instruments and isotopes. Instrumentation to be addressed will include NE Electra, E-600 with style 100 gas sealed probes, pancake probes, and ASP-2e with PG-2 probe.

Federal Interagency Response to Radiological and Nuclear Devices

Special Agent Joe Chaney, FBI Chicago Division

The FBI serves as the lead agency for the investigative, intelligence, counterintelligence, and overall law enforcement response to a terrorist threat or incident in the United States, and is charged with lead agency responsibility for investigating violations of WMD-related statutes. SA Chaney will discuss the FBI's interagency response to threats or incidents involving Improvised Nuclear Devices or Radiological Dispersal Devices.

The Evolution of Radiological Emergency Response: Illinois' Radiological Task Force

Joseph Klinger, Assistant Director, Illinois Emergency Management Agency and Division Manager Nuclear Safety

The State of Illinois has long been a leader in the radiation protection community and has one of the premier radiological emergency response programs in the world. As science and politics have changed our industry focus, the Illinois Emergency Management Agency, Division of Nuclear Safety has transformed its emergency response team into the Radiological Task Force (RTF). The RTF is a NIMS compliant team of specially trained analysts and technicians who are prepared to respond to any level of radiological incident in the State of Illinois.

PRND: The Illinois Project to Design and Distribute Radiation Instrumentation to First Responders

Tom Seif, Health Physicist, Nuclear Effects Analysis Unit, Illinois Emergency Management Agency

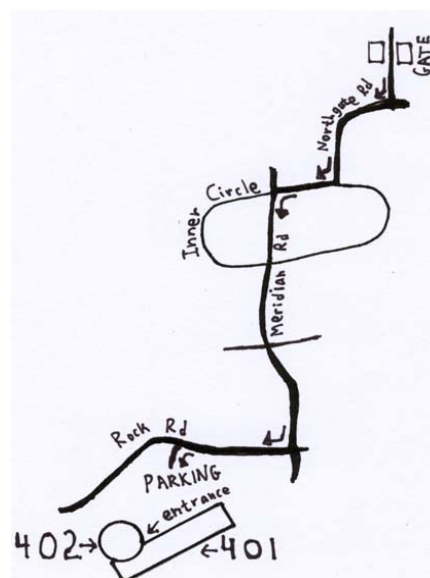
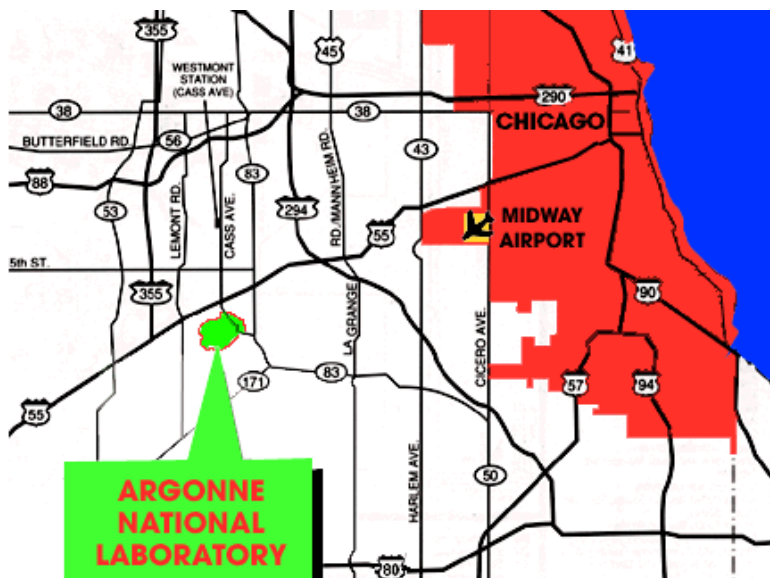
In 2004, the Illinois Terrorism Task Force initiated a project to distribute up to 20,000 radiation detectors to first responders in the state. This presentation will discuss the detector selected and deployment plans. It will also discuss plans of the Illinois Department of Transportation for an advanced radiation detection system to protect major metropolitan areas from illicit radiological and nuclear materials.

Pre-registration REQUIRED: Contact Vernetta Carten at 630-252-3355 or dosimetry@anl.gov. **Cost:** \$12 members, \$15 non-members, pay at door. If you are not an Argonne employee, your name *must* be on the access list and you *must* have a photo ID issued by a governmental authority (e.g., driver's license, passport) to enter the site. **U.S. Citizens:** Pre-register by 4 pm FRIDAY, MARCH 28. **Non-Citizens:** Contact Vernetta Carten AS SOON AS POSSIBLE. Obtaining access approval may take up to 21 days.

Meeting Location: Gallery of Building 402, Advanced Photon Source (APS) facility, Argonne National Laboratory, 9700 S. Cass Avenue, Argonne, IL 60439.

Program: Registration & Continental Breakfast 8:30 am. Presentations 9 am -3 pm. Box lunch provided.

Directions: Argonne is 25 miles southwest of Chicago's loop. From I-55, take the Cass Ave. South exit. Turn right at Argonne sign (just south of I-55) onto Northgate Rd. Show photo ID at gate. Turn right and follow curve in Northgate Rd. to Inner Circle Rd. Turn right. Go left at stop sign (Meridian Rd.). Turn right at stop sign (Rock Rd.). Go half mile to APS. Turn left into parking area. Enter via revolving doors where rectangular and round buildings intersect. Turn right and follow signs to Gallery (down one level).



Membership Update Form

We are currently updating our membership information. Please fill out the following information and mail it to:

Midwest Chapter HPS, PO Box 513, Westmont, IL 60559

Alternately, you may email the information to the Chapter Secretary, Nicole Evans, at nevens@rssi.us.

Name: _____

Home Address 1: _____

Home Address 2: _____

City: _____

State: _____ Zip: _____

Home Phone: _____

Email Address: _____

Employer: _____

Business Address 1: _____

Business Address 2: _____

City: _____

State: _____ Zip: _____

Business Phone: _____

Directory Preferences: Which information do you want published in the Chapter Directory?

Home Address

Business Address

Home Phone

Business Phone

Email Address

Fax Number

Send Chapter Mailings to:

Home Address

Business Address

How would you prefer to receive the newsletter?

Postal Mail Only

E-Mail Only

Both Ways

National HPS Membership:

Not a Member

Fellow Member

Plenary Member

Student Member

Associate Member

Emeritus Member

I would be willing to serve the Chapter in the following capacities:

Serve on Chapter Board

Speak on Radiation Topics

Serve on a Chapter Committee or Project (describe):

Serve on Chapter Board of Directors

Work on Newsletter

Become a Chapter Officer

Provide Other Support (describe):

The mailing label on this newsletter lists the date your dues are paid through. If you would like to pay your dues for 2008, please submit a check in the amount of \$15.00, payable to Midwest Chapter HPS.

Spring 2008 Meeting
New Nuclear Plant Development at Exelon &
Tour of Exelon Nuclear's Emergency Operations Facility

Date: Wednesday, March 19, 2008

Time: 6:00 PM Social Hour
7:00 PM Dinner
7:45 PM Featured Speaker
8:30 PM Tour of EOF

Location: Exelon Nuclear Offices
4300 Winfield Road
(I-88 at Winfield Road)
Warrenville, IL 60555
630-657-2821 or 630-244-8848
for directions

Cost: \$20 per person for members &
spouse; \$23 per person for
non-members.

Menu

**Grilled Steak, Breast of Chicken, Grecian Shrimp, or
any combination – surrounded by Field Greens**

- Traditional Caesar salad
- Fresh spinach with mushrooms, hard boiled eggs,
red onions, & a warm bacon dressing
- Rosemary red potatoes
- Seasonal fresh fruit
- Orzo-Asparagus pasta with fresh mozzarella and
diced plum tomatoes
- Classic tossed pasta primavera
- Antipasto salad
- Grilled vegetables
- Cobb salad
- Mixed field greens with raspberries, bleu cheese
crumbles & tossed walnuts with a raspberry
vinaigrette dressing
- Selection of dessert pastries

Reservations: Phone or e-mail your reservation to John Schrage, our Program Chair, at (630) 657-2821 or John.Schrage@exeloncorp.com by 4 pm Monday, March 17th.
There is no need to specify an entrée.

Midwest Chapter Health Physics Society
P.O. Box 513
Westmont, Illinois 60559