



#### WORKSHOPS

#### The Application of the ASME Code to Packaging and Casks for Transportation and Storage of Radioactive Materials, Spent Nuclear Fuel and High-Level Waste and International Transport Security

Sunday, March 6, 0830 – 1130 Level One, PCC

#### Instructors:

- Dr. Zenghu Han, Ron Pope, Dr. Yung Liu Argonne National Laboratory
- Professor Miles Greiner University of Nevada, Reno

The US DOE Packaging Certification Program (PCP), EM's Office of Packaging and Transportation, (EM-4.24), has sponsored a suite of education training courses that are conducted annually by Argonne National Laboratory (ANL) in support of safety and security for packaging and transportation of nuclear and other radioactive material. Two weeklong courses on the ASME Pressure Vessel Code for Nuclear Transport and Storage, and Nuclear and Other Radioactive Material Transport Security – International are also part of the curriculum for the Graduate Certificate in Nuclear Packaging (GCNP) and Graduate Certificate in Transport Security and Safeguards (GCTSS) program at the University of Nevada, Reno (UNR).

The purpose of this 3-hour tutorial on Sunday morning at WM2022 is to provide an introduction of the learning objectives and highlights of the ASME Code and the international transport security courses of the GCNP and GCTSS programs. Instructors of the tutorial include Senior Staff (Dr. Zenghu Han, Ron Pope, Dr. Yung Liu) of ANL, and Professor Miles Greiner – University of Nevada, former Chair Mechanical Engineering of UNR. Dr. Han and Mr. Pope are also Adjunct Professor of UNR, whereas Dr. Liu serves with Professor Greiner as Co-Principal Educators on the GCNP and GCTSS programs at UNR. Detailed descriptions of the GCNP and GCTSS programs and various courses can be found at https://rampac.energy.gov/home/education/packaging-university.

Participants will receive a certificate of training completion, a complete set of workshop notes, and professional training credit. Refreshments will be provided to workshop attendees.

Register on WM2022 Attendee Registration Portal.



#### US EPA Superfund Site Remediation Program: Radiation Risk Assessment Training

Sunday, March 6, 0830-1730 Level One, PCC

#### Instructors:

• **Fred Dolislager**, The University of Tennessee

EDUCATION &

NON-PROFIT ORGANIZAT

• **Stuart Walker**, EPA Office of Superfund Remediation and Technology Innovation

US EPA Superfund Radiation Risk Assessment is a full-day advanced course that focuses on specific technical and regulatory issues that site managers (e.g., RPMs, OSCs) and technical staff (e.g., risk assessors, health physicists) address when managing sites under the US Environmental Protection Agency's Superfund remedial program. This includes conducting a risk assessment for radioactive contaminants. By taking the course, participants achieve the following objectives:

• Learn a step-by-step approach to the Superfund remedial program's risk assessment process for radioactive contamination. The course discusses the major steps in the Superfund remedial program's risk assessment for radioactive contamination, the EPA recommended guidance documents, and calculators/models for conducting such risk assessments.

• Explore methods for conducting site-specific risk assessments. The course examines how to alter the default input parameters in the Superfund remedial program's risk and dose assessment calculators.

• Discover practical recommendations for improving the radiation risk assessments conducted at your site. The course stresses some obvious and other less obvious aspects helpful in improving the radiation risk assessment process.

• Master information about the radiation risk assessment process. Participants obtain information from experienced professionals about the radiation risk assessment process.

The instructional methodology for this course includes lectures and demonstrations of using EPA's risk and dose assessment calculators developed by the Superfund remedial program. The target audience for this course is site managers, risk assessors and others that want to obtain a working knowledge on conducting Superfund radiation risk assessments. Participants are strongly recommended to bring their own laptops.

Register on <u>WM2022 Attendee Registration Portal</u>.





## Attila4MC - A CAD Integrated Graphical User Interface for Simplifying Monte Carlo Shielding Calculations with MCNP®

Sunday, March 6, 0930-1230 PCC

#### Instructors:

**Andy Cooper and Gregory** Failla of Silver Fir Software, the developer and solver distributor of Attila4MC.

Attila4MC provides users of the MCNP® Monte Carlo code with a graphical user interface (GUI) front end that can eliminate the most time-consuming bottlenecks in setting up, running, and visualizing neutron and gamma shielding calculations. Attila4MC includes CAD integration, GUI based calculation setup, weight windows variance reduction (CADIS/FW-CADIS) powered by the Attila deterministic solver, and integrated solution visualization. This three-hour workshop The first half includes an Attila4MC demonstration showing the full analysis process from CAD through solution visualization on a challenging deep penetration shielding problem. This is followed by an optional hands-on workshop, where attendees can participate in setting up, running, and visualizing a shielding calculation using Attila4MC. To participate in the hands-on workshop, attendees must bring their own laptop (Windows® 10 OS). An Attila4MC installation will be provided during the workshop. MCNP is not provided, and users wishing to run MCNP during the workshop must have a licensed copy installed on their laptops. However, MCNP is not required as precalculated solution files will be provided for all participants. A one-month evaluation license of Attila4MC will be provided to all registered attendees. MCNP® is a registered trademark owned by Triad National Security, LLC, manager and

operator of LANL.

Learning Objective: Attendees will learn how to perform MCNP calculations using the Attila4MC GUI, with an emphasis on deep penetration shielding. Topics to be covered include importing a CAD assembly, setting up a calculation, performing weight windows variance reduction, and visualizing a calculated dose field.

All registered attendees will be provided with a 30-day evaluation license of Attila4MC following the workshop.

A certificate of attendance will be provided.

Register on WM2022 Attendee Registration Portal.





## American Nuclear Society Science Educator Workshop

# Empower your students to know nuclear!

Join ANS at WM2022, presented by WM Symposia Inc., to learn proven strategies for exciting students to understand nuclear science and technology. Work alongside Dr. Mary Lou Dunzik-Gougar, associate dean of the nuclear engineering department of Idaho State University and American Nuclear Society immediate past president.

You will learn classroom-ready experiments and activities designed to further student comprehension. And you'll leave the workshop ready to excite your students about nuclear science and technology. Then, meet industry professionals with free admission to the Welcome Reception following the workshop, 5:00 - 8:00 pm.

- Strengthen your knowledge with a full day of interactive, hands-on nuclear science content.
- Get a FREE CD-V Geiger-Müller meter for your classroom.
- Network with fellow science educators.
- Earn 6 contact hours.
- Lunch and Welcome Reception admission provided.

Space is limited - secure your spot by February 18. Registration fee is \$99.

#### **Register today!**

For more information: jlindegard@ans.org · 800-323-3044 x290



Navigating Nuclear Science: Effective Teaching and Learning Strategies

Sunday, March 6, 2022 9:00 am - 4:00 pm

Phoenix Convention Center Phoenix AZ

#### GET TO KNOW NUCLEAR!

Register on **ANS website.** 





### Preparing Technical Specialists for Nuclear Management / Leadership Responsibilities

Thursday, March 10, 0800 - 1400 PCC

Instructor: James M. Hylko, Consultant

During our professional careers, we may find ourselves transitioning from a technical specialist fixed in a particular area to leading a project, or serving as a department manager. However, unless a company has a specific managerial succession or leadership development program, management / leadership styles are often learned by mirroring early personal experiences, typically involving family, teachers, coaches, and supervisors. Although success can be quantified by achieving schedule and budget milestones, is the manager / leader mystique of success attributed to natural talent, timing, mentoring, or a combination of these factors? This presentation discusses the practical core elements that contribute to becoming an effective manager / leader, such as evaluating your own managerial strengths and areas for improvement, and even analyzing the organization. Also, practical career instructions provide a solid foundation for any department or company that is serious about developing an effective leadership training program for its employees. In turn, any employee in any work environment can begin using this information and accompanying handouts immediately to become a better manager and visionary leader.

Course Outline - 4 - 6 hours

Terminal Objective - By participating in this course, utilizing the slides and supplemental materials, and applying this information in the work environment, the student will develop confidence (or enhance existing skills) to become an efficient manager and visionary leader.

Register on WM2022 Attendee Registration Portal.