Workshop Announcement. . .

Detecting Radiation in Our Radioactive World

A Teacher Workshop
Science Educators -- High School & Middle School
(biology, chemistry, earth science, physics, physical science, life science, environmental, general science, etc.)

Sunday, February 26, 2012– 8:00 A.M. to 5:00 P.M.

This full-day workshop will prepare attendees to teach the basics about radiation, how we detect radiation, and uses of nuclear science and technology in society. Teachers who complete the workshop will receive a wealth of materials – background information, hands-on activities, supplementary resources – and a Geiger counter. Career opportunities in nuclear science and technology will be highlighted during the sessions.

Workshop will include discussion of recent events at Fukushima Daiichi nuclear complex in Japan.

Mark Your Calendar to Attend

- Get **valuable information** and hands-on activities for teaching about radiation, radioactivity, and nuclear technology in your classroom
- Take home **-- FREE – a Geiger Counter** (analog) upon completion
- Receive a **comprehensive teacher handbook** with resources, teaching materials, experiment sheets, visual materials, and **reference materials**
- Meet and **talk with professionals** in nuclear science/technology
- Attendees will receive admission to reception and opening of exhibits at WM2012, Sunday evening. This is an excellent opportunity to learn about equipment and services in the nuclear industry.

Where

Phoenix, AZ - at the Phoenix Convention Center

Sponsors

The American Nuclear Society's Outreach Department is pleased to collaborate with WM Symposia, Inc. to co-sponsor this one-day "Detecting Radiation" workshop for educators. The workshop will be held prior to WM2012, the international waste management conference. ● Funding for the workshop is provided in part by individual and organizational contributions to ANS. Additional support provided by Waste Management Symposia and WM2012. ●

Agenda Outline

7:45 a.m.	Registrant Check-in & Continental Breakfast	
8:00 a.m.	Workshop Sessions	*(Lunch and breaks included in schedule.)*
	Background Information about Radiation, Sources, etc.	
	Activities for the Classroom	
	Detecting Radiation – Using the Geiger Counter	
	Nuclear Science and Technology Applications in Modern Life	
	Uranium fuel cycle – mining and processing	
	Events in Fukushima	
	Radioactive Waste & Transportation Issues	
5:00 p.m.	Workshop Ends	

American Nuclear Society, Outreach Department, 555 N. Kensington Ave., La Grange Park, IL 60526
Phone 708-352-6611 or 800-323-3044; Fax 708-352-0499; E-mail <outreach@ans.org>; Web Site <www.ans.org>

Science Standards

Workshop provides information and training to help teachers address National Science Education Standards for grades 5-8 and 9-12, as developed under the aegis of the National Research Council.

Specific content will help teachers address **physical science content standards** at grades 5-8 (transfer of energy) and 9-12 (structure of atoms and interactions of energy and matter). The workshop and materials will provide information useful in addressing topics in the **history & nature of science**, as outlined by the standards, for both grade levels. Teachers will receive information which helps them assist students in grades 9-12 as they develop scientific models, an activity which is part of the **inquiry standards**.

The workshop will contain information about the structure of atoms, radiation, energy of different types of radiation, interactions of energy and matter, nuclear reactions, sources of radiation in everyday life, and ways to detect and quantify that radiation. Participants will use a modern analog Geiger counter to detect radiation from background and man-made sources.

Presenters

Currently scheduled presenters include: **Dr. Mary Lou Dunzik-Gougar,** Asst. Prof. Nuclear Engineering, Idaho State University and Research Scientist, Idaho National Laboratory**; Mr. Mansel Nelson**, Program Coordinator, Environmental Education Outreach Program, Institute for Tribal Environmental Professionals, Northern Arizona University; **Mr. Terry Price,** Mechanical Engineer at Palo Verde Generation Station of Arizona Public Service Co.**; Mr. Walter Thomas,** Chemistry Teacher - District Science Coordinator, Wickenburg Unified School District, Wickenberg, AZ; **Dr. Debra Thrall,** Executive Director, Albert I. Pierce Foundation, Albuquerque, NM.

Registration Fee & Deadline

There is a $60.00 non-refundable registration fee to reserve your place at the workshop. The **registration deadline is 12:00 noon (Central Time), Tuesday, February 14, 2012.** Please complete the registration form and return it with your check (payable to the American Nuclear Society) to ANS at the address below.

-->Go to http://www.ans.org/pi/edu/teachers/workshops/ for access to an online registration form using your credit card.

Continuing Education Credits

Workshop organizers will gladly verify the number of hours of instruction and your attendance. Workshop participants *may* be eligible for continuing education credits, *depending upon the requirements of their local school districts*.

Space Is Limited

The workshop will be limited in size to optimize opportunities for interaction with presenters. *Registration is on a first-come first-served basis.* To reserve your space, complete and return the registration form **today!** ***Deadline is 12:00 noon (Central Time), Tuesday, February 14, 2012.***

Additional information, directions, and other details provided to registered attendees about one week prior to workshop.

The American Nuclear Society is a not-for-profit, international scientific and educational organization. It was established in 1954 by a group of individuals who recognized the need to unify the professional activities within the diverse fields of nuclear science and technology. Members include people who are engineers, scientists, and educators.

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