ANS 2005 WINTER MEETING

"Talk About Nuclear Differently: A Good Story Untold"

ANS Nuclear Technology Expo

2005 ANS Young Professionals Congress

"Hitchhikers Guide to a Career in Nuclear" • Saturday, November 12, 2005

Professional Development Workshops

"Introduction to New Analysis Capabilities of the ORIGEN Code"

November 13-17, 2005 • Washington, D.C. • Omni Shoreham Hotel

Updated: October 21, 2005

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NOTE:
This is a preliminary listing. Times and locations are subject to change. The Official Program, distributed at the meeting, will contain the final meeting schedule.

our most sincere ***thanks*** *to the*

following ***contributors*** *for their support of the*

2005 ANS Winter Meeting

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ANS 2005 WINTER MEETING

"Talk About Nuclear Differently: A Good Story Untold"

and ANS Nuclear Techology Expo

November 13-17, 2005
Washington, D.C. • Omni Shoreham Hotel

SATURDAY, NOVEMBER 12, 2005

8:30 a.m. - 5:00 p.m.	Young Professionals' Congress: "Hitchhikers Guide to a Career in Nuclear"
5:00 p.m. - 8:00 p.m.	Professional Divisions Workshop

SUNDAY, NOVEMBER 13, 2005

8:00 a.m. - 5:00 p.m.	Professional Development Workshop #1: "Introduction to New Analysis Capabilities of the ORIGEN Code"
1:00 p.m. - 1:30 p.m.	First-Time Attendees Orientation
4:00 p.m. - 5:00 p.m.	Student Assistant Training Session
5:00 p.m. - 6:00 p.m.	Mentoring Program
6:00 p.m. - 7:30 p.m.	President's Reception (Exhibit Hall)

MONDAY, NOVEMBER 14, 2005

8:00 a.m. - 10:00 a.m.	Spouse/Guest Hospitality
8:00 a.m. - 11:30 a.m.	Plenary Session: "Talking About Nuclear Differently: A Critical Element for Our Future"
11:30 a.m. - 1:00 p.m.	Attendee Luncheon in ANS Nuclear Technology Expo
11:30 a.m. - 6:00 p.m.	ANS Nuclear Technology Expo
1:00 p.m. - 2:30 p.m.	ANS President's Special Session: "Emerging Nuclear Nonproliferation Issues"
1:00 p.m. - 5:00 p.m.	Spouse/Guest Tour: "International Spy Museum"
2:30 p.m. - 4:00 p.m.	Technical Sessions: 2005 ANS Winter Meeting
4:30 p.m. - 6:00 p.m.	Reception in the Nuclear Technology Expo
6:30 p.m. - 10:15 p.m.	Evening Event: Reception at the National Air and Space Museum

TUESDAY, NOVEMBER 15, 2005

8:00 a.m. - 10:00 a.m.	Spouse/Guest Hospitality
8:00 a.m. - 10:00 a.m.	General Chair's Special Session: "Critical Infrastructures: Good Stories Untold"
10:00 a.m. - 11:30 a.m.	Technical Sessions: 2005 ANS Winter Meeting
10:00 a.m. - 2:00 p.m.	ANS Nuclear Technology Expo
11:30 a.m. - 1:00 p.m.	ANS Honors and Awards Luncheon
1:00 p.m. - 4:00 p.m.	Technical Sessions: 2005 ANS Winter Meeting
1:00 p.m. - 5:00 p.m.	Spouse/Guest Tour: "The Presidents, Embassy Row, and Lessons in Diplomacy"

WEDNESDAY, NOVEMBER 16, 2005

8:00 a.m. - 10:00 a.m.	Spouse/Guest Hospitality
8:30 a.m. - 11:30 a.m.	Technical Sessions: 2005 ANS Winter Meeting
11:30 a.m. - 1:00 p.m.	Materials Science and Technology Division (MSTD) Awards Luncheon
1:00 p.m. - 4:00 p.m.	Technical Sessions: 2005 ANS Winter Meeting
6:30 p.m. - 10:00 p.m.	Evening Event: Reception and Dinner at the Ronald Reagan Building and International Trade Center

THURSDAY, NOVEMBER 17, 2005

8:30 a.m. - 11:30 a.m.	Technical Sessions: 2005 ANS Winter Meeting
1:00 p.m. - 4:00 p.m.	Technical Sessions: 2005 ANS Winter Meeting

FRIDAY, NOVEMBER 18, 2005

8:00 a.m. - 4:30 p.m.	DOE Nuclear Criticality Safety Program

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Penny Phelps
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Media Chair

Amanda Watson
Edlow International Company
Fun Run Organizer

"Talk About Nuclear Differently: A Good Story Untold"

Omni Shoreham Hotel

The 2005 ANS Winter Meeting will be held November 13-17, 2005, in Washington, DC. There will be a Young Professionals Congress: "Hitchhikers Guide to a Career in Nuclear;" and a Professional Development Workshop: "Introduction to New Analysis Capabilities of the ORIGEN Code", held in conjunction with the 2005 ANS Winter Meeting.

Accommodations/Hotel Information

The Omni Shoreham Hotel will be the location for the 2005 ANS Winter Meeting, where all meeting activities, technical sessions and governance committee meetings will take place. The legendary Omni Shoreham Hotel, host to presidents, dignitaries and world leaders, has served as Washington, D.C.'s premier hotel since 1930. Guests from around the world are drawn to its elegant charm, exquisite guest quarters and distinguished meeting space. And with a central location, this historical landmark is a resort in the heart of the city, surrounded by 11 acres of lush landscaping, stately trees and winding walkways overlooking Rock Creek Park.

MESSAGE TO ATTENDEES:
ANS has made every effort to secure the best possible group nightly room rate for you at the Omni Shoreham Hotel. That rate results from a negotiated overall package of event needs such as sleeping rooms, meeting room space and other requirements. Event costs will increase if ANS falls short of its minimum room block guarantee. Please help ANS keep the costs of this event as low as possible by booking your housing needs at the designated host hotel and through the reservation process created by ANS. Reserving elsewhere means you are booking outside the contracted room block, jeopardizing ANS' ability to meet its contracted obligations and to keep registration fees to a minimum. ANS appreciates your support and understanding of this important issue. Thank you.

ANS Nuclear Technology Expo

The ANS Nuclear Technology Expo will be held in conjunction with the 2005 ANS Winter Meeting in the Lower Level Exhibit Hall of the Omni Shoreham Hotel. Additional information is beginning on page 31.

Workshop for Science Educators

Location: to be determined

A workshop for science educators will be held on Saturday, November 12, 2005, 8:00 a.m. - 5:00 p.m. Please note that this workshop is held off-site. You must contact Chuck Vincent, ANS Outreach Department, at 708-579-8311 for further details. Advance registration is required for all who wish to attend.

This workshop is supported by a grant from the U.S. Department of Energy, Office of Nuclear Energy, Science and Technology and through the individual and organizational contributions to the ANS Public Education Program (PEP).

ANS Registration

ANS Registration will be located at the West Registration Desk of the hotel, on Saturday, November 12th through Thursday, November 17th. Meetings and Workshop Registration, Speakers' and Session Chairs' Desk, and the Message Desk will also be located in the ANS Registration area.

Meeting Registration is required for all attendees and presenters. Badges are required for admission to all technical sessions, workshops, and events. An advance meeting registration form begins on page 34.

Registration Hours

SATURDAY, NOVEMBER 12, 2005
7:30 a.m. - 9:00 a.m.*
*(*Registration for workshop participants only)*
2:00 p.m. - 5:00 p.m.

SUNDAY, NOVEMBER 13, 2005
7:30 a.m. - 9:00 a.m.*
*(*Registration for workshop participants only)*
11:00 a.m. - 7:00 p.m.

MONDAY, NOVEMBER 14, 2005
7:30 a.m. - 5:00 p.m.

TUESDAY, NOVEMBER 15, 2005
7:30 a.m. - 5:00 p.m.

WEDNESDAY, NOVEMBER 16, 2005
7:30 a.m. - 5:00 p.m.

THURSDAY, NOVEMBER 17, 2005
7:30 a.m. - 2:00 p.m.

2005 American Nuclear Society Young Professionals Congress

Saturday, November 12, 2005
8:30 a.m. - 5:00 p.m.
Location: Congressional A & B

"Hitchhikers Guide to a Career in Nuclear"
Co-organized by the ANS Young Members Group (ANS YMG) & the North American Young Generation in Nuclear (NA-YGN)

The inaugural Young Professionals Congress will explore how young professionals can take an active role in their own careers and their profession. The morning sessions will focus on the role of professional societies and the importance of taking active responsibility in your career by helping shape the path of your profession. Invited panelists will provide insights from the viewpoint of top level managers and young professionals who are actively influencing the course of the nuclear science and technology profession in the U.S and abroad. The afternoon session will provide an opportunity for participation in several hands-on interactive break-out sessions that will focus on the development of some of the soft skills needed to direct the path of your career, including:

- Time management
- Speaking with diplomacy, tact and credibility
- Speaking about technical matters to non-technical audiences

Registration fees, which include continental breakfast, lunch, and afternoon coffee break, are:

- ANS Member, registered for ANS National Meeting: $75
- ANS Member, not registered for ANS National Meeting: $250
- Non-ANS Member: $300

The ANS YMG's mission is to encourage and enable all young professional members to be actively involved in the efforts and endeavors of the ANS at all levels (Professional Divisions, ANS Governance, Local Sections, etc) as they transition from the role of a student to the role of a professional. As the kick-off event for the ANS Young Members Group, the 2005 Young Professionals Congress will also provide an opportunity for participants to help define future programs and activities. The Congress is co-organized by the North American Young Generation in Nuclear (NA-YGN), an independent organization of young professionals that are working together throughout North America to share their passion for nuclear science and technology.

Workshop participants are encouraged to also register for the ANS national meeting, attend technical sessions in their areas of interest, and participate in the mentor program.

Student Assistants Program

Attendance at the 2005 ANS Winter Meeting is an exciting professional opportunity for college and graduate students. To help defray travel and living expenses, students can sign up to work as session chairs' assistants. Student assistants must attend the Student Training Session on Sunday, November 13th, 4:00 p.m. - 5:00 p.m. in the Capitol Room of the Omni Shoreham Hotel. Student assistants receive free meeting registration and a copy of the meeting TRANSACTIONS. To apply for one of the student assistant positions,

complete and submit the forms posted on the ANS web site. For more information, contact Elizabeth McAndrew at 410-495-3619 (phone) or elizabeth.l.mcandrew@constellation.com (email); or contact the ANS Meetings Department at 708-579-8287. All students are responsible for paying their own room, tax and incidentals. Please refer to the ANS web site, www.ans.org, for more information about the meeting.

ANS student members who register for the meeting and/or work as session chairs' assistants should pick up a travel assistance form which can be found in the student headquarters room. Student travel assistance is provided through contributions from the ANS professional divisions.

The student headquarters room will be located in the Director's Room of the Omni Shoreham Hotel.

First-Time Attendee Orientation

The ANS Membership Committee will offer an orientation session for first-time ANS meeting attendees. Learn what goes on at national meetings, how the national organization works, and how to get involved at the national and local levels. Whether you are a member or not, student or professional, if this is your first ANS national meeting, the Membership Committee invites you to attend this session.

The session will be held from 1:00 p.m. - 1:30 p.m. on Sunday, November 13th, in the Capitol Room of the Omni Shoreham Hotel.

Mentoring Program

A special mentoring program will be held from 5:00 p.m. - 6:00 p.m. on Sunday, November 13th in Parlor # 230 of the Omni Shoreham Hotel.

ANS members who will serve as mentors hold a variety of positions within the Society, serving on governance committees and working within the divisions. The mentors encompass a wide range of careers and technical specialties, all of which they hope to share with first-time attendees, student members, new members, and those seeking career advancement and networking opportunities.

To participate in the Mentoring Program, use the Mentor Registration Form on page 33.

Message Information Desk

For those who wish to reach an attendee at the meeting, call the hotel phone number at 202-234-0700 and ask for the ANS Message Desk.

Notice for Speakers

All speakers and session chairs must sign in at the "Speakers' Desk," located in the West Registration Foyer of the hotel (Sunday, November 13, 2005, through Thursday, November 17, 2005).

A Speakers' Preview Room, the Committee Room of the hotel, will be available during the following hours:

SUNDAY, NOVEMBER 13, 2005
12:00 p.m. - 6:00 p.m.

MONDAY, NOVEMBER 14, 2005
7:00 a.m. - 4:00 p.m.

TUESDAY, NOVEMBER 15, 2005
7:00 a.m. - 4:00 p.m.

WEDNESDAY NOVEMBER 16, 2005
7:00 a.m. - 4:00 p.m.

THURSDAY, NOVEMBER 17, 2005
7:00 a.m. - 12:00 p.m.

Audio/visual equipment will be set up; so, that speakers may preview their presentation materials.

Conference Office

Location: Sales Conference Room

ANS Secretariat

Location: Executive Room

ANS Media Center

MONDAY, NOVEMBER 14, 2005
7:45 a.m. - 4:00 p.m.

TUESDAY, NOVEMBER 15, 2005
8:00 a.m. - 4:00 p.m.

WEDNESDAY, NOVEMBER 16, 2005
8:00 a.m. - 4:00 p.m.

THURSDAY, NOVEMBER 17, 2005
8:00 a.m. - 2:00 p.m.

Location: Room #430

ANS Media Workroom
The Public Information Committee will offer individualized sessions to ANS members interested in honing their communication skills. Conducted by experienced media professionals, coaching sessions will feature hands-on practice using videotaped interviews followed by constructive critiques. Candid feedback will help ANS members cultivate their abilities to tell their stories, respond to tough questions, and confidently share their knowledge with news media, policy makers and the public. Sessions will be held Monday through Wednesday between 11:30 a.m. and 1 p.m. For more information, contact media@ans.org.

Spouse/Guest Hospitality

Spouse/guest hospitality breakfast will be served in the Parlor #325 of the Omni Shoreham Hotel from 8:00-10:00 a.m., Monday, November 14th through Wednesday, November 16th. Continental breakfast will be served each morning.

Spouse/guest registration is required for admittance to the spouse/guest hospitality breakfast. Spouse/guest registration includes one ticket to the ANS President's Reception and admittance to the spouse/guest breakfast only – it does not include technical sessions or other events. Spouse/guest tours are scheduled. Registration for the tours is separate from the spouse/guest meeting registration.

Attention Runners: ANS Fun Run (organized by the NA YGN)

On Tuesday, November 15th, there will be a noncompetitive run starting at 6:00 a.m. from the lobby of the hotel. We are looking forward to seeing you at the fun run in Washington, DC. Bring shoes and a big smile. We'll take care of the rest! For any further information, contact Amanda Watson at phone number: 202-483-4959, fax number: 202-483-4840, or email: awatson@edlow.com.

Professional Development Workshop

NOTE:
Registration for the workshop is separate from, and in addition to, the meeting registration fee. Use the advance meeting registration form (page 34) to register for the workshop.

PROFESSIONAL DEVELOPMENT WORKSHOP #1:
"Introduction to New Analysis Capabilities of the Origen Code"
SUNDAY, NOVEMBER 13, 2005
8:00 a.m. - 5:00 p.m.
Location: Palladian Ballroom

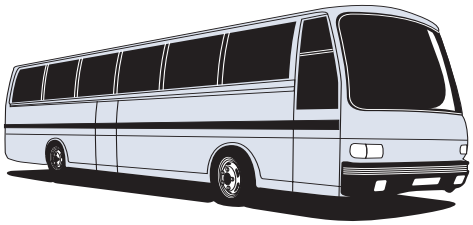
Registration Price for the workshop is $450 for ANS members and $550 for non-members.

DOE Nuclear Criticality Safety Program and "Endusers Initiatives Workshop"

FRIDAY, NOVEMBER 18, 2005
8:00 a.m. - 4:30 p.m.
Location: Diplomat Ballroom

More information is available on page 28.

PLEASE NOTE: The times listed are departure times and return times to/from the hotel. Busses will leave promptly from the Parkview Entrance of the Omni Shoreham Hotel, located just outside of the Blue Room.



CONFERENCE LUNCHEONS

Attendee Luncheon in the Nuclear Technology Expo
MONDAY, NOVEMBER 14, 2005
11:30 a.m. - 1:00 p.m.
Location: Exhibit Hall

One ticket is included with the full meeting registration. Extra tickets can be purchased in advance or on-site at the ANS Registration Desk for $45.

Honors and Awards Luncheon
TUESDAY, NOVEMBER 15, 2005
11:30 a.m. - 1:00 p.m.
Location: Blue Room

Plan to attend the Honors and Awards Luncheon held to recognize the outstanding efforts of the award winners and to celebrate their accomplishments. Tickets can be purchased in advance or on-site at the ANS Registration Desk for $45.

Materials Science and Technology Division (MSTD) Awards Luncheon
WEDNESDAY, NOVEMBER 16, 2005
11:30 a.m. - 1:00 p.m.
Location: Senate Room

Tickets can be purchased in advance or on-site at the ANS Registration Desk for $45.

EVENING EVENTS

Please Note:
You must be registered for the meeting or the Spouse Program to attend evening events.

ANS President's Reception in the Nuclear Technology Expo
SUNDAY, NOVEMBER 13, 2005
6:00 p.m. - 7:30 p.m.
Location: Exhibit Hall

The ANS President's Reception kicks off the meeting on Sunday, November 13, 2005, in the Exhibit Hall of the hotel. One ticket to the ANS President's Reception is included in the full meeting registration fee. Additional tickets can be purchased in advance or on-site at the ANS Registration Desk for $65.

Reception at the National Air and Space Museum
MONDAY, NOVEMBER 14, 2005
6:30 p.m. - 10:15 p.m.

The Spirit of St. Louis

Experience the Smithsonian Institution's National Air and Space Museum like never before. Join us for an exclusive dinner and tour of the largest collection of historic air and spacecraft in the world. The Museum on the National Mall has hundreds of original, historic artifacts on display, 22 exhibition galleries including the Spirit of St. Louis; the Apollo 11 command module Columbia; and a Lunar rock sample that visitors can touch. Experience the early history of the airplane - from some of the earliest notions of flying through the first decade of powered flight - in the Early Flight gallery. The Museum is also a vital center for research into the history, science, and technology of aviation and space flight, as well as planetary science and terrestrial geology and geophysics. While you are there, you won't want to miss a viewing in the Lockheed Martin IMAX(r) Theater open exclusively for our event as well. Tickets can be purchased in advance or on-site at the ANS Registration Desk for $55.

The space suits worn by Buzz Aldrin and Neil Armstrong on the moon.

Reception and Dinner at the Ronald Reagan Building and International Trade Center
WEDNESDAY, NOVEMBER 16, 2005
6:30 p.m. - 10:00 p.m.

The Ronald Reagan Building and International Trade Center is the largest building (3.1 million square feet) in Washington, DC, and is owned by the U.S. General Services Administration. As the first and only federal building dedicated to both government and private use, the Ronald Reagan Building and International Trade Center has been mandated by Congress to bring together the country's best public and private resources to create a national forum for the advancement of trade.

On the outside, it looks like one of Washington, DC's grand federal buildings with its commanding prominence and imposing Indiana limestone facade. But on the inside, it couldn't be more... well, unfederal! A landscape of contemporary style and a skyscape of shimmering glass create a uniquely unconventional setting for the "house full" of surprises inside! On the inside, magnificent architecture, brilliant design and delights around every corner dazzle visitors from around the world. Entertainment will be provided by cirque performers.

Tickets can be purchased in advance or on-site at the ANS Registration Desk for $50.

Ronald Reagan Building and International Trade Center

SPOUSE/GUEST TOURS

"International Spy Museum"
MONDAY, NOVEMBER 14, 2005
1:00 p.m. - 5:00 p.m.

International Spy Museum
(Photograph courtesy of Mark Reinhart)

Today, you will embark on a special guided tour of the International Spy Museum. Your mission will begin with an introduction to espionage, a tradecraft that has been used throughout time and around the world. Hear from spies who, in their own words, describe the challenges and the "game" of spying. Exhibits in the museum will include a look at the life of spies and their cover identities, their gadgets, their skills for observation, analysis and surveillance. "The Secret History of History" traces the "second oldest profession" through the centuries and tells the story of spymasters like Harriet Tubman, George Washington, Elizabeth I and Joseph Stalin. "The Spies Among Us" focuses on the spy intelligence and code breaking used during World War II – how critical secrets were kept and lost. "The War of Spies" charters the modern conflict of a divided Berlin as world powers face off with spies as foot soldiers. See the pervasiveness of the Stasi Spies, where husbands even spied on their wives! Trace the development of spy technology from spy planes to satellites. "21st Century" confronts the contemporary challenges that intelligence faces today, with a stop at the Ops Center to track current events and speak with an intelligence specialist.

After touring the Spy Museum, you will enjoy a brief driving tour past some famous espionage locations, such as the key mailbox near the "Russian Embassy" and "Chadwicks" in Georgetown.

Tickets can be purchased in advance or on-site at the ANS Registration Desk for $40.

Chadwicks in Georgetown

"The Presidents, Embassy Row, and Lessons in Diplomacy"
TUESDAY, NOVEMBER 15, 2005
1:00 p.m. - 5:00 p.m.

You will visit the Cathedral of St. Matthew the Apostle, which honors the patron saint of civil servants. The Cathedral plays a major role in the Catholic life of the nation's capital. It is the seat of the Archbishop of Washington. Pope John II celebrated Mass here on October 6, 1979. President John F. Kennedy's funeral Mass was said on November 25, 1963. Requiems have been held here for several heads of state. The "Red Mass," celebrated annually in the fall, requests guidance from the Holy Spirit for the conduct of the legal profession. It is attended by Supreme Court justices and members of Congress, the Cabinet, diplomatic corps, and other government departments, sometimes including the President of the United States.

Established in 1840, St. Matthew's originally was located at 15th and H Streets, N.W. Construction of the present church began in 1893 under the direction of Monsignor Thomas Sim Lee. The first Mass was celebrated on June 2, 1895. The church was dedicated in 1913 and designated a cathedral in 1939 when the Archdiocese of Washington was established.

The Cathedral is one of the most impressive houses of worship in the United States. Designed by noted New York architect C. Grant La Farge, the Cathedral has been cited "as [having] one of the most beautiful church interiors of modern times." Its walls are laden with shimmering mosaics suggestive of those found in the renowned churches of Ravenna, Italy. The Cathedral is in the form of a Latin cross 155 feet long and 136 feet wide at the transepts. The interior of the dome rises 190 feet. The body of the Cathedral seats about 1,000 persons.

Next, you will travel through the international area of Embassy Row. Here, you will ride past beautiful embassies, chanceries and residences representing nations throughout the world. You will soon arrive at the Woodrow Wilson House for a private tour of the home that has the distinction of being Washington's only presidential home. Waddy Wood, a prominent Washington architect, designed the elegant Georgian Revival home in 1915. You will be delighted by the National Trust for Historic Preservation's efforts to maintain President Wilson's home as he enjoyed it. From his library (nicknamed the "Dugout" for his favorite sport, baseball), to original gramophone records and the microphone he used in his last broadcast to the nation, the memorabilia of the 1920's and his era are omnipresent. This house is truly a reflection of the man and his times.

Tickets can be purchased in advance or on-site at the ANS Registration Desk for $40.

Beyond Washington, DC's most familiar vistas, the federal city unwinds into a lively cosmopolitan center.

Casual cafes and upscale bistros line the trendy streets of Georgetown, while the downtown district sizzles with a host of new restaurants.

Spontaneous jazz notes tumble out of the windows of U Street's night clubs, while world-class performers take the stage at the highly acclaimed Kennedy Center.

Kayakers tackle the Potomac River as it winds past the elegant marble tributes to America's great leaders.

Technical Sessions by Track

(Asterisks indicate special sessions.)

Track 1: Talk About Nuclear Differently: A Good Story Untold

*Opening Plenary: Talking About Nuclear Differently: A Critical Element for Our Future, Mon. a.m. (8:00–11:30 a.m.)

*ANS President's Special Session: Emerging Nuclear Nonproliferation Issues, Mon. p.m. (1:00–2:30 p.m.)

Nuclear Energy: Quantifying and Communicating the Benefits–Panel, Mon. p.m.

International Spent Fuel Storage Developments–Panel, Mon. p.m.

*General Chair's Special Session: Critical Infrastructures: Good Stories Untold, Tues. a.m. (8:00–10:00 a.m.)

*Waste Isolation Pilot Plant and Low-Level Waste Disposal Facilities, Tues. a.m.

Focus on Communications: Meet the Media–Panel, Wed. a.m.

Focus on Communications: Communications is Science, Too–Panel, Thurs. a.m.

Focus on Communications: Speaking to the Media–Panel, Thurs. p.m.

Communicating with Your Congressperson or Senator–Panel, Thurs. p.m.

Track 2: Nuclear Plant Systems, Advanced Energy Research, Operations, and Training

Equipment Reliability: A Driving Force in Nuclear Asset Performance–Panel, Mon. p.m.

Education and Training: General, Mon. p.m.

Bringing Value to the American Nuclear Society: The Employer's and Young Professional's Perspective–Panel, Tues. a.m.

Management Perspectives on the Use of Risk Information in Operational Plant Management–Panel, Tues. a.m.

Small Liquid-Metal–Cooled Fast Reactors, Tues. p.m.

Progress and Review of U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Programs–Panel, Tues. p.m.

*Training Excellence Awards, Tues. p.m.

Current Experience in Meeting Training and Workforce Challenges for New Nuclear Power Plants–Panel, Tues. p.m.

Planning a Country's First Power Reactor: Trials and Tribulations–Panel, Wed. a.m.

U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Research, Wed. a.m.

Digital Upgrade Issues in an Evolving Technical and Regulatory Environment, Wed. p.m.

Innovations in Nuclear Engineering Education, Training, and Distance Learning, Wed. p.m.

Advanced Nuclear Energy Systems Including Nuclear Power 2010: Research and Development, Thurs. a.m.

Human Factors: General, Thurs. p.m.

Track 3: Environment, Safety, and Health

Modeling and Transportation of Radiation in the Environment—I, Mon. p.m.

Modeling and Transportation of Radiation in the Environment—II, Thurs. p.m.

Analytic and Regulatory Approaches for the Waste Isolation Pilot Plant Mobile Characterization Unit Safety Basis, Tues. a.m.

Emergency Preparedness and Response, Tues. a.m.

Criticality Safety Emergency Planning, Tues. a.m.

A Systems Approach to Integrated Safety Management–Papers/Panel, Tues. p.m.

Risk-Informed Revisions to 10 CFR 50.46–Panel, Tues. p.m.

Realism in Nuclear Criticality Safety, Tues. p.m.

Clearance of Materials from Regulatory Control–Panel, Wed. a.m.

Essential Results of PSA '05–Panel, Wed. a.m.

Data, Analysis, and Operations for Nuclear Criticality Safety—I, Wed. a.m.

Data, Analysis, and Operations for Nuclear Criticality Safety—II, Wed. p.m.

Disposition of Low-Activity Radioactive Waste–Panel, Wed. p.m.

Emerging Topics in Nuclear Installation Safety Technology, Wed. p.m.

Climate Policy in the U.S. Senate–Panel, Thurs. a.m.

Nuclear Facility Risk Analysis, Thurs. a.m.

Nuclear Criticality Safety Standards–Forum, Thurs. a.m.

Track 4: Security

Relationship Between Security and Safety, Mon. p.m.

Radiation Detection Technologies for Homeland Security Applications, Mon. p.m.

Emerging Nonproliferation Issues and Compact Reactors, Wed. a.m.

Track 5: Nuclear Engineering Science

Reactor Physics: General—I, Mon. p.m.

*Reactor Physics: General—II, Tues. p.m.

General Two-Phase Flow—I, Mon. p.m.

General Two-Phase Flow—II, Tues. a.m.

Current Issues in Computational Methods–Roundtable, Mon. p.m.

*Advances in Radiation Transport and Physics for Radiation Detection Simulation, Tues. p.m.

*Student Design Competition, Tues. p.m.

U.S. Department of Energy Nuclear Engineering Education Research Highlights—I, Tues. p.m.

U.S. Department of Energy Nuclear Engineering Education Research Highlights—II, Wed. a.m.

U.S. Department of Energy Nuclear Engineering Education Research Highlights—III, Wed. p.m.

Transport Methods: General, Wed. a.m.

Thermal Hydraulics Code Development and Application—I, Wed. a.m.

Thermal Hydraulics Code Development and Application—II, Wed. p.m.

Computational Methods: General—I, Wed. p.m.

Computational Methods: General—II, Thurs. a.m.

Radiation Protection and Shielding: General, Wed. p.m.

Reactor Analysis Methods, Thurs. a.m.

Thermal Hydraulics of Generation IV Reactors, Thurs. a.m.

Reactor Physics Design, Validation, and Operating Experience, Thurs. p.m.

Thermal Hydraulics: Computational Fluid Dynamics and Heat Transfer, Thurs. p.m.

Track 6: Fuel Cycles, Materials, and Decommissioning

Preserving the Repository: Closing the Fuel Cycle in the United States–Panel, Mon. p.m.

Data Needs for Transportation of Spent Fuel, Tues. p.m.

Regulatory Update–Panel, Wed. a.m.

Evaluation of Recent Transmutation Scenarios for Partitioning/Transmutation of Actinides and Heat-Generating Fission Products, Wed. p.m.

U.S. Department of Energy Cleanup Program Update–Panel, Wed. p.m.

Separations and Fuel Fabrication Technologies for Advanced Fuel Cycles, Thurs. a.m.

Nuclear Fuel Performance Modeling and Benchmarking, Thurs. a.m.

Hot Topics and Emerging Issues–Panel, Thurs. a.m.

Advanced Head-End Improvements for Processing Spent Nuclear Fuels and Recycling, Thurs. p.m.

Gas Reactor Fuels and Materials, Thurs. p.m.

Lessons Learned from Near-Complete Decommissionings–Panel, Thurs. p.m.

Track 7: Nonpower, Medical, and Radiation Applications

*Medical Physics: From Research to Innovation to Clinical Application—I, Mon. p.m.

Medical Physics: From Research to Innovation to Clinical Application—II, Tues. a.m.

*Isotopes and Radiation: General, Tues. a.m.

*Nuclear Analytical Measurements on the Road to Food Safety—I, Tues. p.m.

*Nuclear Analytical Measurements on the Road to Food Safety—II, Wed. a.m.

*Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—I, Wed. p.m.

*Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—II, Thurs. a.m.

*Low-Energy Nuclear Reactions, Thurs. p.m.

Track 8: Emerging Nuclear Technologies

Experiments in Support of Accelerator Applications, Mon. p.m.

Use of Nuclear Energy for Hydrogen Production—I, Tues. a.m.

Use of Nuclear Energy for Hydrogen Production—II–Papers/Panel, Tues. p.m.

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—I, Tues. a.m.

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—II, Wed. a.m.

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—III, Wed. p.m.

General Space Technology Interests, Tues. a.m.

(Asterisks indicate special sessions. Parentheses indicate cosponsorship.)

Special Sessions

*Opening Plenary: Talking About Nuclear Differently: A Critical Element for Our Future, Mon. a.m. (8:00–11:30 a.m.)

*ANS President's Special Session: Emerging Nuclear Nonproliferation Issues, Mon. p.m. (1:00–2:30 p.m.)

*General Chair's Special Session: Critical Infrastructures: Good Stories Untold, Tues. a.m. (8:00–10:00 a.m.)

Accelerator Applications (AAD)

Experiments in Support of Accelerator Applications, Mon. p.m.

Biology and Medicine (BMD)

*Medical Physics: From Research to Innovation to Clinical Application—I, Mon. p.m.

Medical Physics: From Research to Innovation to Clinical Application—II, Tues. a.m.

*Nuclear Analytical Measurements on the Road to Food Safety—I, Tues. p.m.

*Nuclear Analytical Measurements on the Road to Food Safety—II, Wed. a.m.

Decommissioning, Decontamination, and Reutilization (DDRD)

Regulatory Update–Panel, Wed. a.m.

U.S. Department of Energy Cleanup Program Update–Panel, Wed. p.m.

Hot Topics and Emerging Issues–Panel, Thurs. a.m.

Lessons Learned from Near-Complete Decommissionings–Panel, Thurs. p.m.

Education and Training (ETD)

Education and Training: General, Mon. p.m.

*Student Design Competition, Tues. p.m.

Progress and Review of U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Programs–Panel, Tues. p.m.

*Training Excellence Awards, Tues. p.m.

Current Experience in Meeting Training and Workforce Challenges for New Nuclear Power Plants–Panel, Tues. p.m.

Focus on Communications: Meet the Media–Panel, Wed. a.m.

U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Research, Wed. a.m.

Innovations in Nuclear Engineering Education, Training, and Distance Learning, Wed. p.m.

Focus on Communications: Communications is Science, Too–Panel, Thurs. a.m.

Focus on Communications: Speaking to the Media–Panel, Thurs. p.m.

Communicating with Your Congressperson or Senator–Panel, Thurs. p.m.

Environmental Sciences (ESD)

Modeling and Transportation of Radiation in the Environment—I, Mon. p.m.

Modeling and Transportation of Radiation in the Environment—II, Thurs. p.m.

Use of Nuclear Energy for Hydrogen Production—I, Tues. a.m.

Use of Nuclear Energy for Hydrogen Production—II–Papers/Panel, Tues. p.m.

Emergency Preparedness and Response, Tues. a.m.

Clearance of Materials from Regulatory Control–Panel, Wed. a.m.

Disposition of Low-Activity Radioactive Waste–Panel, Wed. p.m.

Climate Policy in the U.S. Senate–Panel, Thurs. a.m.

Fuel Cycle and Waste Management (FCWMD)

Preserving the Repository: Closing the Fuel Cycle in the United States–Panel, Mon. p.m.

International Spent Fuel Storage Developments–Panel, Mon. p.m.

*Waste Isolation Pilot Plant and Low-Level Waste Disposal Facilities, Tues. a.m.

Data Needs for Transportation of Spent Fuel, Tues. p.m.

Emerging Nonproliferation Issues and Compact Reactors, Wed. a.m.

Evaluation of Recent Transmutation Scenarios for Partitioning/Transmutation of Actinides and Heat-Generating Fission Products, Wed. p.m.

Separations and Fuel Fabrication Technologies for Advanced Fuel Cycles, Thurs. a.m.

Advanced Head-End Improvements for Processing Spent Nuclear Fuels and Recycling, Thurs. p.m.

Fusion Energy (FED)

U.S. Department of Energy Nuclear Engineering Education Research Highlights—I, Tues. p.m.

U.S. Department of Energy Nuclear Engineering Education Research Highlights—II, Wed. a.m.

U.S. Department of Energy Nuclear Engineering Education Research Highlights—III, Wed. p.m.

Human Factors (HFD)

Human Factors: General, Thurs. p.m.

Isotopes and Radiation (IRD)

(Radiation Detection Technologies for Homeland Security Applications, Mon. p.m.)

*Isotopes and Radiation: General, Tues. a.m.

(*Nuclear Analytical Measurements on the Road to Food Safety—I, Tues. p.m.)

(*Nuclear Analytical Measurements on the Road to Food Safety—II, Wed. a.m.)

(Emerging Nonproliferation Issues and Compact Reactors, Wed. a.m.)

*Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—I, Wed. p.m.

*Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—II, Thurs. a.m.

*Low-Energy Nuclear Reactions, Thurs. p.m.

Materials Science and Technology (MSTD)

Nuclear Fuel Performance Modeling and Benchmarking, Thurs. a.m.

Gas Reactor Fuels and Materials, Thurs. p.m.

Mathematics and Computation (MCD)

Current Issues in Computational Methods–Roundtable, Mon. p.m.

*Advances in Radiation Transport and Physics for Radiation Detection Simulation, Tues. p.m.

Transport Methods: General, Wed. a.m.

Computational Methods: General—I, Wed. p.m.

Computational Methods: General—II, Thurs. a.m.

Nuclear Criticality Safety (NCSD)

Criticality Safety Emergency Planning, Tues. a.m.

Realism in Nuclear Criticality Safety, Tues. p.m.

Data, Analysis, and Operations for Nuclear Criticality Safety—I, Wed. a.m.

Data, Analysis, and Operations for Nuclear Criticality Safety—II, Wed. p.m.

Nuclear Criticality Safety Standards–Forum, Thurs. a.m.

Nuclear Installations Safety (NISD)

Relationship Between Security and Safety, Mon. p.m.

Analytic and Regulatory Approaches for the Waste Isolation Pilot Plant Mobile Characterization Unit Safety Basis, Tues. a.m.

A Systems Approach to Integrated Safety Management–Papers/Panel, Tues. p.m.

(Risk-Informed Revisions to 10 CFR 50.46–Panel, Tues. p.m.)

Essential Results of PSA '05–Panel, Wed. a.m.

Emerging Topics in Nuclear Installation Safety Technology, Wed. p.m.

Nuclear Facility Risk Analysis, Thurs. a.m.

Operations and Power (OPD)

Nuclear Energy: Quantifying and Communicating the Benefits–Panel, Mon. p.m.

Equipment Reliability: A Driving Force in Nuclear Asset Performance–Panel, Mon. p.m.

Bringing Value to the American Nuclear Society: The Employer's and Young Professional's Perspective–Panel, Tues. a.m.

Management Perspectives on the Use of Risk Information in Operational Plant Management–Panel, Tues. a.m.

Small Liquid-Metal–Cooled Fast Reactors, Tues. p.m.

(Progress and Review of U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Programs–Panel, Tues. p.m.)

Planning a Country's First Power Reactor: Trials and Tribulations–Panel, Wed. a.m.

(U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Research, Wed. a.m.)

Digital Upgrade Issues in an Evolving Technical and Regulatory Environment, Wed. p.m.

Advanced Nuclear Energy Systems Including Nuclear Power 2010: Research and Development, Thurs. a.m.

Radiation Protection and Shielding (RPSD)

Radiation Detection Technologies for Homeland Security Applications, Mon. p.m.

(Analytic and Regulatory Approaches for the Waste Isolation Pilot Plant Mobile Characterization Unit Safety Basis, Tues. a.m.)

(Emergency Preparedness and Response, Tues. a.m.)

(*Advances in Radiation Transport and Physics for Radiation Detection Simulation, Tues. p.m.)

(*Nuclear Analytical Measurements on the Road to Food Safety—I, Tues. p.m.)

(*Nuclear Analytical Measurements on the Road to Food Safety—II, Wed. a.m.)

(Transport Methods: General, Wed. a.m.)

Radiation Protection and Shielding: General, Wed. p.m.

Reactor Physics (RPD)

Reactor Physics: General—I, Mon. p.m.

*Reactor Physics: General—II, Tues. p.m.

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—I, Tues. a.m.

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—II, Wed. a.m.

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—III, Wed. p.m.

Reactor Analysis Methods, Thurs. a.m.

Reactor Physics Design, Validation, and Operating Experience, Thurs. p.m.

Thermal Hydraulics (THD)

General Two-Phase Flow—I, Mon. p.m.

General Two-Phase Flow—II, Tues. a.m.

Risk-Informed Revisions to 10 CFR 50.46–Panel, Tues. p.m.

Thermal Hydraulics Code Development and Application—I, Wed. a.m.

Thermal Hydraulics Code Development and Application—II, Wed. p.m.

Thermal Hydraulics of Generation IV Reactors, Thurs. a.m.

Thermal Hydraulics: Computational Fluid Dynamics and Heat Transfer, Thurs. p.m.

Aerospace Nuclear Science and Technology Technical Working Group (ANST)

General Space Technology Interests, Tues. a.m.

MONDAY • NOVEMBER 14, 2005

7:30 A.M. - 5:00 P.M.	**MEETING REGISTRATION**
8:00 A.M. - 10:00 A.M.	**SPOUSE/GUEST HOSPITALITY**
8:00 A.M. - 11:30 A.M.	**2005 ANS WINTER MEETING OPENING PLENARY** "Talking About Nuclear Differently: A Critical Element for Our Future"
11:30 A.M. - 1:00 P.M.	**ATTENDEE LUNCHEON IN ANS NUCLEAR TECHNOLOGY EXPO**
11:30 A.M. - 6:00 P.M.	**ANS NUCLEAR TECHNOLOGY EXPO**
1:00 P.M. - 2:30 P.M.	**ANS PRESIDENT'S SPECIAL SESSION** "Emerging Nuclear Nonproliferation Issues"
1:00 P.M. - 5:00 P.M.	**SPOUSE/GUEST TOUR** "International Spy Museum"
2:30 P.M. - 4:00 P.M.	**2005 ANS WINTER MEETING TECHNICAL SESSIONS** • Preserving the Repository: Closing the Fuel Cycle in the United States–Panel • Nuclear Energy: Quantifying and Communicating the Benefits–Panel • Relationship Between Security and Safety • Equipment Reliability: A Driving Force in Nuclear Asset Performance–Panel • Reactor Physics: General—I • International Spent Fuel Storage Developments–Panel • Education and Training: General • Experiments in Support of Accelerator Applications • Modeling and Transportation of Radiation in the Environment—I • Medical Physics: From Research to Innovation to Clinical Application—I • Radiation DetectionTechnologies for Homeland Security Applications • General Two-Phase Flow—I • Current Issues in Computational Methods–Roundtable
4:30 P.M. - 6:00 P.M.	**RECEPTION IN THE NUCLEAR TECHNOLOGY EXPO**
6:30 P.M. - 11:00 P.M.	**EVENING EVENT** "Reception at the National Air and Space Museum"

MONDAY, NOVEMBER 14, 2005 • 8:00 A.M.

Opening Plenary: Talking About Nuclear Differently: A Critical Element for Our Future [Track 1]

WELCOMING REMARKS:
- E. James Reinsch *(President, Bechtel and President, American Nuclear Society)*

SPEAKERS:
- Session Introduction, Thomas A. Christopher *(CEO, AREVA, Inc.)*
- Energy Bill, U.S. Sen. Chuck Hagel of Nebraska
- Environment, Patrick Moore, Ph.D. *("The Sensible Environmentalist," Greenspirit)*
- Public Opinion, Ann Stouffer Bisconti *(President, Bisconti Research, Inc.)*
- Financial Perspective, James K. Asselstine *(Managing Director, Lehman Brothers)*
- Session Closing, Michael J. Wallace *(President, Constellation Energy)*

MONDAY, NOVEMBER 14, 2005 • 1:00 P.M.

ANS President's Special Session: Emerging Nuclear Nonproliferation Issues. *Session Organizer:* Alex Burkart *(U.S. Dept of State)* [Track 1]

PANELISTS:
- Ambassador Linton Brooks *(NNSA)*
- Ambassador Sergio Duarte *(Brazilian Foreign Ministry)*
- Mr. Richard J. Stratford *(U.S. Dept. of State)*
- Mr. Abdul S. Minty *(South African Foreign Ministry)*, invited

MONDAY, NOVEMBER 14, 2005 • 2:30 P.M.

Preserving the Repository: Closing the Fuel Cycle in the United States–Panel, sponsored by FCWMD. *Session Organizers:* Emory Collins *(ORNL)*, James Bresee *(DOE/NE)* [Track 6]

PANELISTS:
- Paul Dickman *(DOE)*
- Russ Dyer *(Consultant)*
- Kent Williams *(ORNL)*
- Jim Laidler *(ANL)*
- Mel Buckner *(Westinghouse SRC)*

Nuclear Energy: Quantifying and Communicating the Benefits–Panel, sponsored by OPD. [Track 1]

PANELISTS:
- Quantifying and Communicating Environmental Benefits, Mary Quillian *(NEI)*
- Quantifying and Communicating Economic Benefits to the Community, Elizabeth King *(NEI)*, Peter Hyde *(Millstone Power Plant)*
- Making a Case for Nuclear Technologies with Numbers and Passion, Alan Waltar *(PNNL)*

Relationship Between Security and Safety, sponsored by NISD. *Session Organizer:* Herbert Massie *(DNFSB)* [Track 4]

Safety, Security, and Emergency Preparedness Changes and Challenges in the Post 9/11 World, Anthony McMurtray, Kathryn Brock *(NRC)*

A Simulation Methodology for the Evaluation of the Physical Protection Systems in Nuclear Power Plants, Chansoo Kim *(Seoul Natl Univ)*, Sangman Kwak *(Ajou Univ)*, Chang Hyun Chung *(Seoul Natl Univ)*

Development of a NPP's Security Vulnerability Assessment Tool, Isao Sakaki *(Toshiba)*, Hirohide Chiba *(Toshiba Sol)*

Emergency Preparedness Communications Challenges Post 9/11, Anthony McMurtray, Kathryn Brock *(NRC)*

Equipment Reliability: A Driving Force in Nuclear Asset Performance–Panel, sponsored by OPD. [Track 2]

PANELISTS:
- Ken Ferguson *(Management Consult)*
- Walter M. Justice II *(TVA)*
- Steve Swearingin *(Reliability Eng)*
- Jim Fornof *(WesDyne)*
- William McBrine *(Altran Sol)*
- Osamu Maekawa *(Toshiba Nucl Eng Ctr)*

Reactor Physics: General—I, sponsored by RPD. [Track 5]

Calculation of Uranium-236 Penalty for Recycle Uranium Fuels, H. Okan Zabunoğlu *(Hacettepe Univ)*

Microscopic Cross Section Generation of Generation IV Nuclear Reactors for VISTA Project, Mehmet Tombakoğlu *(Hacettepe Univ)*

Multi-Purpose Simulation for Space Nuclear Power Systems, Mark Ayres, David Wait, Andrew J. Zillmer *(Rocketdyne Propulsion and Power)*

Power Flattening in ARIES-RS Hybrid Reactor, Sümer Sahin *(Gazi Univ)*, Mustafa Ubeyli *(TOBB Univ of Economics and Technol)*

International Spent Fuel Storage Developments–Panel, sponsored by FCWMD, in collaboration with the Special Committee on Nuclear Nonproliferation. *Session Organizers:* Herbert Feinroth *(Gamma Eng)*, Reed Johnson *(Univ of Virginia, Retired)* [Track 1]

PANELISTS:
- M. Levenson *(U.S. Natl Acad of Sciences)*
- N. Lavorov *(Russian Acad of Science)*
- Shih-Kuei Chen *(Tapei Economic and Cultural Representative Office)*
- Representative from Europe to be determined.
- Representative from U.S. Dept of State to be determined.

Education and Training: General, sponsored by ETD. *Session Organizer:* Mike Robinson *(Bechtel Bettis)* [Track 2]

Fleet Asset Optimization for Power Generation, Dan Niswonger, Colin Palombo *(Artemis Int Sol)*

Application of the Evolutionary Matrix Concept to Early Detection of BWR Equipment Malfunction, Javier Ortiz Villafuerte II *(ININ)*, Elvis Efren Dominguez Ontiveros, Carlos Estrada Perez *(Texas A&M)*, Rogelio Castillo Duran *(ININ)*, Yassin A. Hassan *(Texas A&M)*

Educating Students on Core Loading with TRIGLAV, William Arthur Wharton III *(Univ of Texas)*, David Sean O'Kelly, Michael Krause *(Univ of Texas, Austin)*

A Global Warming Website to Build Public Support for Nuclear Power, Vagadu Varda *(Legislative Birdwatchers)*

Experiments in Support of Accelerator Applications, sponsored by AAD. [Track 8]

Phase IV of the RACE Project—European Collaborations, Denis Beller *(UNLV)*, Joachim Knebel *(FZK)*

Accelerator Driven Subcritical System Experiments at The University of Texas, David Sean O'Kelly *(Univ of Texas, Austin)*, Denis Beller *(UNLV)*, William S. Charlton *(Texas A&M)*

ISU Accelerator-Driven Sub-Critical System Characterization, Jianwei Chen, Denis Beller, Frank Harmon, Konstantin Sabourov *(Idaho State Univ)*

Reactor-Accelerator Coupling Experiments (RACE): Heat Generation Rates Using W-Cu and U Targets, William S. Charlton, V. K. Taraknath Woddi *(Texas A&M)*, Sean O'Kelly, Taylor Green *(Univ of Texas, Austin)*, Denis Beller *(Idaho State Univ)*

Finding Material Defects in Composites Through Accelerator-Based, Gamma-Induced, Positron Annihilation Spectroscopy, Kristen Smith, Doug Wells, Alan Hunt *(Idaho State Univ)*

Modeling and Transportation of Radiation in the Environment—I, sponsored by ESD. [Track 3]

Analysis of Tritium Transport in Flooded South Carolina Savannah River Floodplain, Alfred Garrett, James S. Bollinger, David Hayes *(SRNL)*

Evaluation of Cs-137 Concentration in Deer from the Savannah River Site and Environs, Donald Padgett, Peter Fledderman *(Westinghouse SRC)*

Improved Resuspension Dose Model for RADTRAN Transportation Risk-Assessment Code, Janelle J. S. Penisten *(Univ of Michigan)*, Ruth F. Weiner *(SNL)*

Implementing a Monte Carlo Sampling Interface for RADTRAN, Matthew L. Dennis *(Univ of Missouri, Rolla)*, Janelle J. S. Penisten *(Univ of Michigan)*, Ruth F. Weiner *(SNL)*

Medical Physics: From Research to Innovation to Clinical Application—I, sponsored by BMD. *Session Organizer:* Christina Plies *(Medical X-Ray Ctr)* [Track 7]

Monte Carlo Assessment of Five Boron Neutron Capture Therapy Facilities for the Treatment of Breast Cancer, Daniel W. Mundy, Tatjana Jevremovic *(Purdue Univ)*, invited, BMD Student Competition Winner

Monte Carlo Simulation of Low Energy X-Ray Microbeam Interactions with a Single Cell, Shaun D. Clarke, Tatjana Jevremovic *(Purdue Univ)*, invited, BMD Student Competition Winner

Medical Physics Calculations with MCNP: A Primer, Alexis D. Lazarine, Tim Goorley *(LANL)*

Comparison of 3-D Deterministic and Monte Carlo Cross Sections for Medical Physics Problems, Ahmad Al-Basheer, Monica Ghita, Glenn E. Sjoden, Benoit Dionne *(Univ of Florida)*

Radiation Detection Technologies for Homeland Security Applications, sponsored by RPSD; cosponsored by IRD. *Session Organizers:* Raymond Klann *(ANL)*, Tim Brown *(SRNL)* [Track 4]

Evaluation of Timed Neutron Detection for Detection of Mines and Other Explosives, Judith Ann Bamberger, Bruce Schmitt, Tatyana Colgan *(PNNL)*, Richard Anderson Craig *(Consultant)*

Artificial Neural Networks for Nuclear Source Characterization, Shaun D. Clarke, Rong Gao, Yunlin Xu, Lefteri H. Tsoukalas, Thomas J. Downar *(Purdue Univ)*

A Novel Portable Ferroelectric Source of Fast MeV Neutrons for Homeland Security Applications, Andrei Lipson, George H. Miley *(Univ of Illinois)*

General Two-Phase Flow—I, sponsored by THD. *Session Organizers:* Larry Hochreiter *(Penn State)*, Xiaodong Sun *(Ohio State)*, Kurshad Muftuoglu *(Westinghouse)* [Track 5]

Interfacial Wavy Motion in Film Boiling Heat Transfer from Downward-Facing Surfaces, Chan Soo Stephan Kim, Mong Jin Yu, Kune Yull Suh *(Seoul Natl Univ)*

Advanced Safety Injection System Design for Reduction of Direct Bypass During a LBLOCA, Sang Hyuk Yoon, Kune Yull Suh *(Seoul Natl Univ)*

Applicability of Scaled Passive Condensation Heat Transfer Data to Prototype, Shripad T. Revankar *(Purdue Univ)*

Capacitive Thin Film Thickness Probes for Two-Phase Flow in Porous Beds, Hayden C. Olenik, Shripad T. Revankar *(Purdue Univ)*

Correlation Factor for the Local Bulk Mean Temperature in Sub-Channel, Fan-Bill Cheung *(Penn State)*

A Study on Bubble Growth and Bubble Movement in Horizontal Sub-Cooled Boiling Flows, Wen Wu, Peipei Chen, Barclay G. Jones, Ty A. Newell *(Univ of Illinois)*

Current Issues in Computational Methods–Roundtable, sponsored by MCD. *Session Organizer:* Todd Palmer *(Oregon State Univ)* [Track 5]

TUESDAY • NOVEMBER 15, 2005

7:30 A.M. - 5:00 P.M.	**MEETING REGISTRATION**
8:00 A.M. - 10:00 A.M.	**SPOUSE/GUEST HOSPITALITY**
8:00 A.M. - 10:00 A.M.	**GENERAL CHAIR'S SPECIAL SESSION** "Critical Infrastructures: Good Stories Untold"
10:00 A.M. - 11:30 A.M.	**2005 ANS WINTER MEETING TECHNICAL SESSIONS** • Bringing Value to the American Nuclear Society: The Employer's and Young Professional's Perspective–Panel • Use of Nuclear Energy for Hydrogen Production—I • Management Perspectives on the Use of Risk Information in Operational Plant Management–Panel • Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—I • Isotopes and Radiation: General • Analytic and Regulatory Approaches for the Waste Isolation Pilot Plant Mobile Characterization Unit Safety Basis • General Space Technology Interests • Emergency Preparedness and Response • Medical Physics: From Research to Innovation to Clinical Application—II • Criticality Safety Emergency Planning • General Two-Phase Flow—II • Waste Isolation Pilot Plant and Low-Level Waste Disposal Facilities
10:00 A.M. - 2:00 P.M.	**ANS NUCLEAR TECHNOLOGY EXPO**
11:30 A.M. - 1:00 P.M.	**ANS HONORS AND AWARDS LUNCHEON**
1:00 P.M. - 4:00 P.M.	**2005 ANS WINTER MEETING TECHNICAL SESSIONS** • A Systems Approach to Integrated Safety Management–Papers/Panel • Small Liquid-Metal–Cooled Fast Reactors • Use of Nuclear Energy for Hydrogen Production—II–Papers/Panel • Advances in Radiation Transport and Physics for Radiation Detection Simulation • Reactor Physics: General—II • Student Design Competition • Data Needs for Transportation of Spent Fuel • Progress and Review of U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Programs–Panel • Risk-Informed Revisions to 10 CFR 50.46–Panel • Nuclear Analytical Measurements on the Road to Food Safety—I • Realism in Nuclear Criticality Safety • U.S. Department of Energy Nuclear Engineering Education Research Highlights—I • Training Excellence Awards–Panel • Current Experience in Meeting Training and Workforce Challenges for New Nuclear Power Plants–Panel
1:00 P.M. - 5:00 P.M.	**SPOUSE/GUEST TOUR** "The Presidents, Embassy Row, and Lessons in Diplomacy"

TUESDAY, NOVEMBER 15, 2005 • 8:00 A.M.

General Chair's Special Session: Critical Infrastructures: Good Stories Untold [Track 1]

SPEAKERS:
- Human Infrastructure: Current Workforce Status, Maria Korsnick *(Vice President, Ginna Nuclear Power Plant, Constellation Generation Group)*
- Educating Future Workforce, Dr. Lee Dodds *(Nuclear Engineering Department Head, University of Tennessee)*
- Physical Infrastructure, Thomas C. Houghton *(Senior Project Manager, New Plant Development, NEI)*
- Fuel Reprocessing, Jacques Besnainou *(Senior Executive Vice President, Reprocessing and Recycling, AREVA)*

TUESDAY, NOVEMBER 15, 2005 • 10:00 A.M.

Bringing Value to the American Nuclear Society: The Employer's and Young Professional's Perspective–Panel, sponsored by OPD. *Session Organizer:* North American Young Generation in Nuclear [Track 2]

PANELISTS:
- W. David Pointer *(ANL)*
- Kathryn McCarthy *(INL)*
- Amy Cordner *(Constellation Energy)*
- Kerry Basehore *(Dominion Gen)*
- Patrick Heher *(Univ of South Carolina)*
- Michael Corradini *(Univ of Wisconsin, Madison)*
- Lawanda Chisolm *(Westinghouse)*
- Susan Hess *(AREVA, Inc.)*
- George Tsakanikas *(Bechtel Power)*
- Lee Finewood *(Booz Allen Hamilton)*

Use of Nuclear Energy for Hydrogen Production—I, sponsored by ESD. [Track 8]

Coupled High Temperature Reactor and Sulfur Iodide Process for Hydrogen Generation, Jesse Foster, Kristen Wangerin, Andrew Michael Ward, Adam Wichman *(Purdue Univ)*

Uranium Requirement for a Hydrogen Economy, Thomas D. Curtis, Travis Warren Knight *(Univ of South Carolina)*

HyS Thermochemical-Hybrid Cycle Using Heat Exchanger Network Synthesis and Pinch Technology, Jason Alton Eargle, Travis W. Knight *(Univ of South Carolina)*, Maximilian Gorensek *(SRNL)*

MELCOR Modification for Large-Scale Hydrogen Production Using Nuclear Thermochemical Cycles, Sal Rodriguez, Randall Gauntt *(SNL)*, Shripad Revankar, Karen Vierow *(Purdue Univ)*

Management Perspectives on the Use of Risk Information in Operational Plant Management–Panel, sponsored by OPD. *Session Organizer:* Mark Reinhart *(NRC)* [Track 2]

PANELISTS:
- Mark Reinhart *(NRC)*
- Gene Hughes *(ERIN Eng and Research)*
- Joe Donahue *(Progress Energy)*
- Ching Guey *(FP&L)*
- Dave Bucheit *(Dominion Res)*
- Harry Faulhaber *(OPPD)*
- A representative from Arizona Public Service to be determined.

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—I, sponsored by RPD. *Session Organizer:* Taek Kyum Kim *(ANL)* [Track 8]

Neutronic Analysis to Support Validation of Safety Analysis Codes for the VHTR, Wei Ji, Jeremy L. Conlin, Gokhan Yesilyurt, William R. Martin, John C. Lee *(Univ of Michigan)*, Forrest B. Brown *(LANL)*

GT-MHR Full Power Reactivity Insertion Transient Using a Novel Dynamic Simulink Model, Mehdi Reisi Fard, Thomas Blue, Don W. Miller *(Ohio State)*

Analysis of a PBMR-400 Control Rod Ejection Accident Using PARCS-THERMIX and the Nordheim Fuchs Model, Volkan Seker, Thomas J. Downar *(Purdue Univ)*

Preliminary Investigations on the Importance of Using Deterministic Transport Methods for the Anaylsis of the PBMR, Bismark Mzubanzi Tyobeka *(Penn State)*, Andreas Pautz *(Framatome ANP)*, Kostadin Ivanov *(Penn State)*

Coupled Neutronics/Thermal-Hydraulics Calculation of PBMR-400 Equilibrium Core, Cemal Niyazi Sokmen, Mehmet Tombakoğlu, Aydın Karahan, Cihangir Celik *(Hacettepe Univ)*

Isotopes and Radiation: General, sponsored by IRD. *Session Organizer:* Stephen LaMont *(LANL)* [Track 7]

WIPP Certification of a New SuperHENC Box Counter at Hanford, Naeem Abdurrahman *(Fluor Hanford)*, Alan Simpson, Steve Barber *(BIL Sol)*, invited

Development of a Dual 14 MeV Neutron Generator Facility, William D. James *(Texas A&M)*

Monte Carlo Analysis of the Impact of Random Summing on Passive Assay of Pebble Bed Reactor Fuel, Jianwei Chen *(Idaho State Univ)*, Ayman I. Hawari *(NCSU)*

Development of Efficient Oxygen Isotope Separation Process Using Membrane Distillation, Jaewoo Kim, Hwa-Rim Choi, Dae-Sik Chang, Do-Young Jeong *(KAERI)*

An Expedited, Robust Method for the Electrodeposition of Actinides, Sheldon Landsberger *(Univ of Texas, Austin)*, Alex Plionis, Derek Anderson Haas *(Univ of Texas)*, George Brooks *(LANL)*

Analytic and Regulatory Approaches for the Waste Isolation Pilot Plant Mobile Characterization Unit Safety Basis, sponsored by NISD; cosponsored by RPSD. *Session Organizer:* Kevin O'Kula *(Washington SMS)* [Track 3]

TRU Waste Packaging and Shipment: Past, Present and Future, Dermot M. Winters *(DNFSB)*

An Improved Analytical Approach to Determination of the Explosion Effects of Flammable Gas-Air Mixtures, Joong Yang *(LLNL)*

Review of Hazard Analysis Processes at U.S. Department of Energy Environmental Management Sites, Dae Chung *(DOE)*, Patrice McEahern, C. Brad Evans *(Calibre)*

Subsurface Disposal Area Case Study: Developing Insights to Guide Retrieval Operations, Patrice McEahern *(Calibre)*

General Space Technology Interests, sponsored by ANST. *Session Organizer:* T. K. Larson *(INL)* [Track 8]

SiC and UN for Advance Fuel Design Concepts, Edward J. Lahoda, Pablo R. Rubiolo *(Westinghouse)*, Herbert Feinroth *(Gamma Eng)*

Comparison of Damage in Silicon Carbide: Proton Versus Neutron Radiation, Jonathan A. Kulisek, Behrooz Khorsandi, Thomas Blue *(Ohio State)*

Emergency Preparedness and Response, sponsored by ESD; cosponsored by RPSD. [Track 3]

Proposed Regional Centers for Emergency Response to Support the Interagency Modeling and Atmospheric Assessment Center, Robert P. Addis *(Westinghouse SRC)*, John L. Merrick, Jr. *(DOE)*

Meteorological Support for Emergency Response at the Savannah River Site, Robert P. Addis *(Westinghouse SRC)*

Transport of Radionuclides Within an Urban Office Building, Sheldon Landsberger *(Univ of Texas, Austin)*, George Anthony Sayre *(Univ of Texas)*, Robert Jubin, Joanna McFarlane *(ORNL)*

Lessons Learned During DSSNET—Emergency Exercises, Gert Sdouz *(Austrian Research Ctrs)*

The Savannah River National Laboratory's Response During the Graniteville, SC Train Accident, Robert Addis *(Westinghouse SRC)*, Charles H. Hunter *(SRTC)*, Matthew J. Parker, Robert L. Buckley *(SRNL)*, Allen H. Weber *(SRNL, Retired)*

Medical Physics: From Research to Innovation to Clinical Application—II, sponsored by BMD. *Session Organizer:* Christina Plies *(Medical X-Ray Ctr)* [Track 7]

Initial Performance Characterization for a Thermalized Neutron Beam for Neutron Capture Therapy Research at Washington State University, David W. Nigg *(INL)*, Patrick Sloan *(Univ of Illinois)*, James R. Venhuizen, Charles A. Wemple *(INL)*

Development of a Long-Filament Line X-Ray Source for Diffraction Enhanced Imaging (DEI) for Mammography and General Radiography, Xiaoqin Wang, Mohamed Bourham, J. Doster *(NCSU)*

Calibration of Semiconductor Detector for In-Vivo Dosimetry, Sami M. Al Shaikh, Abdulraheim Kinsara *(King Abdulaziz Univ)*, Belal Moftah *(King Abdulaziz Univ Hospital)*

Application of European Commission Reference Dose Levels in Some Common CT Examinations in King AbdulAziz University Hospital, Murad Mohammad Gronfla, A. A. Kinsara *(King Abdulaziz Univ)*, A. A. Maimani *(King Abdulaziz Univ Hospital)*, W. H. Abulfaraj, S. I. Bhuiyan, E. Elmohr, S. Sheikh *(King Abdulaziz Univ)*

Criticality Safety Emergency Planning, sponsored by NCSD. *Session Organizer:* Jim Baker *(LANL)* [Track 3]

Recent Evolution of the ANSI/ANS-8.23 Standard for Nuclear Criticality Accident Emergency Planning and Response, James Baker *(LANL)*

Managing Emergency Planning and Response for Criticality Accidents at CEA, Ludovic Reverdy, Jean Pierre Rzepka, Francis Barbry, Véronique Massé *(CEA)*

Recent Developments in Criticality Emergency Planning and Preparedness in the UK, Neil Harris *(British Nucl Grp)*

First Responders and Criticality Accidents, Valerie L. Putman *(INL)*, Douglas M. Minnema *(DOE)*

General Two-Phase Flow—II, sponsored by THD. *Session Organizers:* Larry Hochreiter *(Penn State)*, Xiaodong Sun *(Ohio State)*, Kurshad Muftuoglu *(Westinghouse)* [Track 5]

PIV Measurements in a Matched Refractive Index Packed Bed, Elvis Efren Dominguez Ontiveros, Yassin A. Hassan, Carlos Estrada Perez, Buck Barner *(Texas A&M)*, Javier Ortiz Villafuerte *(ININ)*

Supercritical Fluid Blowdown Experiment and Preliminary Results, Guillaume Paul Mignot, Mark H. Anderson, Michael L. Corradini *(Univ of Wisconsin, Madison)*

An Improved PTV Algorithm to Analyze Single and Two-Phase Turbulent Flows, Carlos Eduardo Estrada Perez, Elvis Efren Dominguez Ontiveros, Yassin A. Hassan *(Texas A&M)*, Javier Ortiz Villafuerte *(ININ)*

Rod Bundle Heat Transfer Facility—Steam Cooling Test Series, Lawrence E. Hochreiter *(Penn State)*

Phenomenological Investigation of Gas-Liquid Flows, Mark Ho, Guan H. Yeoh *(ANSTO)*

Waste Isolation Pilot Plant and Low-Level Waste Disposal Facilities, sponsored by FCWMD. *Session Organizer:* T. J. Hirons *(Consultant)* [Track 1]

Beyond the Field of Dreams: WIPP Programmatic and Regulatory Challenges and Accomplishments, 1999–2005, Ines Triay *(DOE)*, invited

Technical and Regulatory Challenges in WIPP Compliance Recertification, Russell Patterson *(DOE)*, Steven C. Kouba *(Washington Grp Int)*

Applying and Enhancing the WIPP Transportation System, Casey Gadbury, Chuan-Fu Wu *(DOE)*, Angela Johnson *(Washington TRU Sol)*

Implementation of Administrative Controls for Contact-Handled TRU Waste Operations, Chuan-Fu Wu *(DOE)*, Andy Stanley *(CBFO Tech Assistance Contractor)*

TUESDAY, NOVEMBER 15, 2005 • 1:00 P.M.

A Systems Approach to Integrated Safety Management–Papers/Panel, sponsored by NISD. *Session Organizer:* Herbert Massie *(DNFSB)* [Track 3]

A Review of Integrated Safety Management, Lawrence M. Zull, Daniel L. Burnfield, Matthew B. Moury *(DNFSB)*

Improvements to Hazards Analysis to Support Hazards Reduction Across a Major Nuclear Site, Jim Tisaranni *(Washington Grp Int)*, Nina S. Adams *(Westinghouse SRC)*

PANEL DISCUSSION

PANELISTS:

- R. Bruce Matthews *(DNFSB)*
- James McConnell *(DOE)*
- Chip Lagdon *(DOE)*
- James Angelo *(LANL)*
- Charles Spencer *(Westinghouse SRC)*

Small Liquid-Metal–Cooled Fast Reactors, sponsored by OPD. [Track 2]

No Refueling Core Design for the 4S, Yasushi Tsuboi, Tsugio Yokoyama *(Toshiba)*, Nobuyuki Ueda *(CRIEPI)*

Development of an Advanced Fuel Subassembly for Non-Refueling Core, Tomonari Koga, Satoshi Nishimura, Izumi Kinoshita *(CRIEPI)*

Development of an Extrapolation Method for Longer Metallic Fuel Pin for Non-Refueling Core, Nobuyuki Ueda, Izumi Kinoshita *(CRIEPI)*

Reactivity and Power Effects of Fission Gas Release in Pb and Na Cooled ENHS Cores, Ser Gi Hong *(KAERI)*, Ehud Greenspan *(Univ of California, Berkeley)*

An Economic Analysis of GEN-IV Lead Cooled Fast Reactor, Neil Brown, Alan Lamont *(LLNL)*

Alternative ENHS Core Designs for Increasing Reactivity Worth of Control Elements, Ser Gi Hong *(KAERI)*, Ehud Greenspan *(Univ of California, Berkeley)*

Development of Neutronics Analysis Technique for Non-Refueling Core (Part 1: Critical Experiment), Shigeaki Okajima, Masahiro Fukushima *(JAERI)*, Toshikazu Takeda *(Osaka Univ)*

Development of Neutronic Analysis Technique for Non-Refueling Core Part 2: Method, Toshikazu Takeda, Takanori Kitada *(Osaka Univ)*, Shigeaki Okajima *(JAERI)*

Development of Neutronic Analysis Technique for Non-Refueling Core Part 3: Burn-Up Calculation, Yasushi Nauchi, Tetsuo Matsumura, Nobuyuki Ueda *(CRIEPI)*

Use of Nuclear Energy for Hydrogen Production—II–Papers/Panel, sponsored by ESD. *Session Organizer:* Jan Van Erp *(Consultant)* [Track 8]

Development of a New Thermochemical and Electrolytic Hybrid Hydrogen Production Process for Sodium Cooled FBR, Toshio Nakagiri, Takeshi Kase, Shoichi Kato, Kazumi Aoto *(JNC)*

Optmisation of ANTARES for Electricity and Process Heat Production: A Practical Example Illustration Applied to Oil Recovery from Bitumen and Upgrading, Michel Lecomte, Ronald Affolter *(Framatome ANP)*, Jerome Gosset *(Ecole des Mines de Paris)*

PANEL DISCUSSION
PANELISTS:
- David Henderson *(DOE)*
- John Cleveland *(IAEA)*
- David Barber *(INL)*
- Guenter Conzelmann *(ANL)*

Advances in Radiation Transport and Physics for Radiation Detection Simulation, sponsored by MCD; cosponsored by RPSD. *Session Organizer:* Todd Palmer *(Oregon State Univ)* [Track 5]

Transport Method Challenges in Radiation Detection Scenario Analysis, Leon Eric Smith *(BMI)*, Christopher J. Gesh, Richard T. Pagh *(PNNL)*, invited

Computer Modeling of Radiation Portal Monitors for Homeland Security Applications, Richard Pagh, Richard Kouzes, Ronald McConn, Sean Robinson, John Schweppe, Edward Siciliano *(BMI)*, invited

Radiation Detection Scenario Analysis with Deterministic Transport Methods, Christopher Gesh, George Meriwether *(BMI)*, Richard T. Pagh *(PNNL)*, Leon Eric Smith *(BMI)*, invited

Detector Response Function Status and Needs, Robin P. Gardner *(NCSU)*, invited

Production of Vacancies in SiC Detectors After Irradiation with Monoenergetic Neutrons, Behrooz Khorsandi, Thomas Blue, Jonathan A. Kulisek, Wolfgang Windl, Don W. Miller *(Ohio State)*

Application of Duality Principles to Solve Inverse Particle Transport Problem: A Framework, Jean C. Ragusa *(Texas A&M)*

MCNPX Deconvolution Tallies, John S. Hendricks, Gregg W. McKinney *(LANL)*

Reactor Physics: General—II, sponsored by RPD. [Track 5]

The Interplay of Theory and Experiments in Reactor Physics, Massimo Salvatores *(ANL/CEA)*, invited, Eugene P. Wigner Reactor Physicist Award Winner

Advanced LWR Multi-Recycle Concepts, Edward A. Hoffman, Robert N. Hill, Temitope A. Taiwo *(ANL)*

Finding MOX Equivalence to Uranium Fuel Assembly, Jose R. Ramirez-Sanchez, Sr., Gustavo Alonso, Sr. *(ININ)*

Benchmark Sensitivity Analysis for the Np-237 and HEU Fast System Reflected by Polyethylene, David J. Loaiza, Rene G. Sanchez, David Hayes *(LANL)*

Comparison of ENDF/B-VI and Initial ENDF/B-VII Results for the MCNP Criticality Validation Suite, Russell D. Mosteller *(LANL)*

Code-to-Code Benchmark of Coolant Void Reactivity (CVR) in the ACR-700 Reactor, Kevin Clarno, Mark L. Williams, Jess C. Gehin *(ORNL)*, Christopher A. Cotton, Deokjung Lee, Thomas J. Downar *(Purdue Univ)*

BWR Rod Drop Accident Analysis, David J. Diamond, Arantxa Cuadra *(BNL)*

Cost Evaluation of Power Uprate Due to Reduction of In-Core Power Peaking Factor, Akio Yamamoto, Masafumi Adachi, Yoshihiro Yamane, Yasunori Kitamura *(Nagoya Univ)*

Student Design Competition, sponsored by ETD. *Session Organizer:* H. Lee Dodds *(Univ of Tennessee)*. All invited. [Track 5]

Student submittals are currently being evaluated, and the titles will be published in the final program.

Data Needs for Transportation of Spent Fuel, sponsored by FCWMD. *Session Organizer:* R. Einzinger *(NRC)* [Track 6]

Assessment of Data Availability and Data Needs for Spent Fuel Transportation, Joseph Y. R. Rashid *(ANATECH)*, Albert Machiels *(EPRI)*

Radial Hydride-Induced Embrittlement in High-Burnup Spent-Fuel Zircaloy-4 Cladding, Robert Daum, Saurin Majumdar, Y. Y. Liu, Mike Billone *(ANL)*

Mechanical Properties for Irradiated Zircaloy, Kenneth J. Geelhood, Carl E. Beyer *(PNNL)*

Properties of Titanium-Nitride for High Level Waste Packaging Enhancement, Candice Scheffing, Man-Sung Yim, Jag Kasichainula, Mohamed A. Bourham *(NCSU)*

Assessment of Spent Nuclear Fuel at the Potential Yucca Mountain Repository, Tae M. Ahn *(NRC)*, Vijay Jain *(Southwest Research Inst)*, Christopher Ryder *(NRC)*

Yucca Mountain Project Total System Model, Stephen L. Turner *(TerranearPMC)*, Scott Gillespie *(Bechtel SAIC)*

Progress and Review of U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Programs–Panel, sponsored by ETD; cosponsored by OPD. *Session Organizer:* Robert Fjeld *(Clemson Univ)* [Track 2]

PANELISTS:
- John Bernard *(MIT)*
- Steve Binney *(Oregon State Univ)*
- Jack Brenizer *(Penn State)*
- Ayman Hawari *(NCSU)*
- Dan Reece *(Texas A&M)*
- Wynn Volkert *(Univ of Missouri, Columbia)*

Risk-Informed Revisions to 10 CFR 50.46–Panel, sponsored by THD; cosponsored by NISD. *Session Organizer:* Larry Hochreiter *(Penn State)* [Track 3]

PANELISTS:
- Larry Hochreiter *(Penn State)*
- Bert Dunn *(AREVA, Framatome ANP)*
- Brian Sheron *(NRC)*
- Wayne Harrison *(Westinghouse Owners Grp)*
- A representative from BWR Owners Grp to be determined.

Nuclear Analytical Measurements on the Road to Food Safety—I, sponsored by BMD; cosponsored by RPSD, IRD. *Session Organizers:* Rolf Zeisler *(NIST)*, Elisabete A. De Nadai Fernandes *(Univ of São Paulo, CENA)*. All invited. [Track 7]

Uses of NAA in the Development of Standard Reference Materials (SRMs) for Dietary Supplements, Rolf Zeisler, Rabia O. Spatz *(NIST)*

Uranium in Environmental Water and Its Health Effects, Momoko Chiba *(Juntendo Univ)*, Satoshi Fukuda *(Natl Inst of Radiological Science)*

Development of a Transportable System for Measuring Radioactive Contamination in Food, William Cunningham *(FDA)*

Potassium Transfer from Coffee and Tea to Infusions by K-40 Detection, Juan M. Navarrete *(Natl Univ of Mexico)*

Determination of Long-Lived Plutonium in Seaweed by TIMS, Hiromu Kurosaki, Lisa Outola, Ken Inn *(NIST)*

How Safe are Medicinal Herbs? Elemental Characterization of Medicinal Herbs and Herbal Formulations by INAA, Amarnath Nath Garg *(Educational Inst)*

Realism in Nuclear Criticality Safety, sponsored by NCSD. *Session Organizer:* Shean Monahan *(LANL)* [Track 3]

Applying Realism to NCS Analyses at the Y-12 National Security Complex, Jerry Lichtenwalter, Peter L. Angelo *(Y-12 Natl Security Complex)*

Sources of Nuclear Criticality Safety Unrealism, Burton Rothleder *(DOE)*

The Benefits of Realistic Modeling in the Criticality Safety Assessment of Plutonium Contaminated Material Waste, Tristan Thomas (BNFL)

Reflected Realism, Nicholas Brown, Robert Maurer, Derek Slagle *(Nucl Fuel Svc)*

Criticality Safety and Disposal of Drummed Waste of Unknown Fissile Contents, Georgina J. Willock *(British Nucl Grp Sellafield Limited)*

U.S. Department of Energy Nuclear Engineering Education Research Highlights—I, sponsored by FED. *Session Organizer:* Cindie Jensen *(INL)* [Track 5]

Effect of Tube Diameter on Condensation in a Passive Condenser Tube, Shripad T. Revankar *(Purdue Univ)*

Horizontal Heat Exchanger Scaling for Passive Containment Heat Removal System Experiments, Yong Jae Song, Karen Vierow *(Purdue Univ)*

Energy-Loss Straggling for Electrons and Positrons Using Moment-Preserving Methods, Lee Harding, Anil Prinja *(Univ of New Mexico)*

Efficiency of Variance Reduction Schemes for Monte Carlo Isotopic Inventory Analysis, Phiphat Phruksarojanakun, Paul Wilson *(Univ of Wisconsin, Madison)*

Progress Report on the Development of Time Dependent Neutral Particle Transport Benchmarks in Two and Three Dimensions, Barry Douglas Ganapol *(Univ of Arizona)*

Improving Monte Carlo Source Convergence with the Functional Expansion Technique, David P. Griesheimer, Jesse Cheatham, James P. Holloway, William R. Martin *(Univ of Michigan)*

Advanced Reactor Passive Emergency Core Cooling System Stratified Flow Experiments Project No: DE-FG07-03ID14500, Hiral Kadakia *(Idaho State Univ)*, Jim Liou *(Univ of Idaho)*, Brian Williams *(Idaho State Univ)*, Richard R. Schultz *(INL)*

Training Excellence Awards–Panel, sponsored by ETD. *Session Organizer:* Richard Coe *(Columbia Technol Assoc)*. All invited. [Track 2]

The ANS-ETD Training Excellence Awards are given to recognize individuals and/or groups who have made significant contributions to the field of nuclear training and education. The Training Excellence Pioneer Award is given to individuals who were instrumental in the design, development, and industry support of nuclear training and education.

Award recipients are invited to make a presentation at the award session.

Current Experience in Meeting Training and Workforce Challenges for New Nuclear Power Plants–Panel, sponsored by ETD. *Session Organizer:* Pierre Tremblay *(OPG)* [Track 2]

PANELISTS:
- Elizabeth Lopez *(OPGN)*
- Ke Yang *(Quinshan)*
- Tom McGrath *(TVA Nucl)*

WEDNESDAY • NOVEMBER 16, 2005

7:30 A.M. - 5:00 P.M.	**MEETING REGISTRATION**
8:00 A.M. - 10:00 A.M.	**SPOUSE/GUEST HOSPITALITY**
8:30 A.M. - 11:30 A.M.	**2005 ANS WINTER MEETING TECHNICAL SESSIONS** • Emerging Nonproliferation Issues and Compact Reactors • Planning a Country's First Power Reactor: Trials and Tribulations–Panel • Clearance of Materials from Regulatory Control–Panel • Transport Methods: General • Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—II • Focus on Communications: Meet the Media–Panel • Essential Results of PSA '05–Panel • U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Research • Thermal Hydraulics Code Development and Application–I • Nuclear Analytical Measurements on the Road to Food Safety—II • Data, Analysis, and Operations for Nuclear Criticality Safety—I • U.S. Department of Energy Nuclear Engineering Education Research Highlights—II • Regulatory Update–Panel
11:30 A.M. - 1:00 P.M.	**MATERIALS SCIENCE AND TECHNOLOGY DIVISION (MSTD) AWARDS LUNCHEON**
1:00 P.M. - 4:00 P.M.	**2005 ANS WINTER MEETING TECHNICAL SESSIONS** • Evaluation of Recent Transmutation Scenarios for Partitioning/Transmutation of Actinides and Heat-Generating Fission Products • Digital Upgrade Issues in an Evolving Technical and Regulatory Environment • Disposition of Low-Activity Radioactive Waste–Panel • Computational Methods: General—I • Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—III • Innovations in Nuclear Engineering Education, Training, and Distance Learning • Emerging Topics in Nuclear Installation Safety Technology • Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—I • Thermal Hydraulics Code Development and Application—II • Radiation Protection and Shielding: General • Data, Analysis, and Operations for Nuclear Criticality Safety—II • U.S. Department of Energy Nuclear Engineering Education Research Highlights—III • U.S. Department of Energy Cleanup Program Update–Panel
6:30 P.M. - 10:00 P.M.	**EVENING EVENT** "Reception and Dinner at the Ronald Reagan Building and International Trade Center"

WEDNESDAY, NOVEMBER 16, 2005 • 8:30 A.M.

Emerging Nonproliferation Issues and Compact Reactors, sponsored by FCWMD; cosponsored by IRD, in collaboration with the Special Committee on Nuclear Nonproliferation. *Session Organizer:* Dana Christensen *(LANL)* [Track 4]

Quantitative Assessment of Probabilistic Measures for Proliferation Resistance, Meng Yue, Lap-Yan Cheng, Robert Bari *(BNL)*

Nonproliferation Assessment Tool Software, Victoria Pratt *(Univ of Texas, Austin)*, Kendra Foltz Biegalksi, Sr., Tomer Pintel *(Univ of Texas)*, Sheldon Landsberger *(Univ of Texas, Austin)*, Michael Whitaker *(ORNL)*

The "Atoms for Peace Reactor (AFPR)"—A Proliferation-Resistant, Long-Life, 100 MWe Nuclear Energy System, Georgi Victor Tsiklauri *(Battelle)*, Thomas Shea *(BMI)*, Alan E. Waltar, George H. Meriwether *(PNNL)*, Richard Brouns *(BMI)*

Nonproliferation Features of the Small Secure Transportable Autonomous Reactor (SSTAR) for Worldwide Sustainable Nuclear Energy Supply, James J. Sienicki, David C. Wade *(ANL)*

Control of Supercritical CO_2 Brayton Cycle for LFR Autonomous Load Following, Anton Moisseytsev, James Sienicki *(ANL)*

Experiments for Confirmation of Chemical Form of Polonium in LBE, Terumitsu Miura, Toru Obara, Hiroshi Sekimoto *(Tokyo Inst of Technol)*

Planning a Country's First Power Reactor: Trials and Tribulations–Panel, sponsored by OPD. [Track 2]

PANELISTS:
- Thomas Sanders *(SNL)*
- Akiro Omoto *(IAEA)*
- Oum Bouhalal *(ENIM)*
- Mike Diekman *(ANS)*
- Representative from Chile to be determined.
- Representative from Bulgaria to be determined.

Clearance of Materials from Regulatory Control–Panel, sponsored by ESD. *Session Organizer:* S. Y. Chen *(ANL)* [Track 3]

PANELISTS:
- S. Y. Chen *(ANL)*
- Al Johnson *(Duratek)*
- Scott Moore *(NRC)*
- Michael Mobley *(State of Tennessee)*
- Andrew Wallo III *(DOE)*

Transport Methods: General, sponsored by MCD; cosponsored by RPSD. *Session Organizer:* Todd Palmer *(Oregon State Univ)* [Track 5]

AGENT Code: New Features and Benchmark Tests, Tatjana Jevremovic, Mathieu Hursin, Alison Burns, John Hopkins *(Purdue Univ)*

Weight Window Generation for Photon Electron Coupled Transport with Photon Source and Electron Detection, Taro Ueki *(Univ of New Mexico)*

Yet Another Optimum Polar Angle Quadrature Set for the Method of Characteristics, Masato Tabuchi, Akio Yamamoto, Tomohiro Endo *(Nagoya Univ)*, Naoki Sugimura, Tadashi Ushio, Masaaki Mori *(Nucl Eng)*

Variance Calculations for Electron Energy Straggling in Binary Statistical Media, Erin Fichtl, Anil Prinja *(Univ of New Mexico)*

New Eigenvalue Evaluation Technique in the Heterogeneous Coarse Mesh Transport Method, Benoit Forget, Farzad Rahnema *(Georgia Tech)*

Probabilistic and Generalized Regression Neural Networks for Non-Multiplying Material Identification, Roberto Furfaro, Barry Douglas Ganapol *(Univ of Arizona)*

Adaptive Angular Resolution for the Finite Element-Spherical Harmonics Method, HyeongKae Park, Cassiano R. de Oliveira *(Georgia Tech)*

Stability and Monotonicity Conditions for Linear, Grey, 0-D Implicit Monte Carlo Calculations, Scott W. Mosher, Jeffery D. Densmore *(LANL)*

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—II, sponsored by RPD. *Session Organizer:* Taek Kyum Kim *(ANL)* [Track 8]

A High Temperature, Non-TRISO Fuel and Clad Design with Commercial-Grade Enrichment for the Prismatic Block VHTR, James William Sterbentz *(INL)*

Comparison of VHTR and ALWR Fuel Enrichments, Won Sik Yang, Taek Kim, Temitope A. Taiwo *(ANL)*

Uncertainty Analysis of VHTR Fuel Compact with Randomly Distributed Particles, Hyung Jin Shim, Chang Hyo Kim *(Seoul Natl Univ)*

VHTR Double-Heterogeneous Lattice Model Radial Fission Power Profile Versus Burnup, Gray Chang *(INL)*

Reactivity-Equivalent Physical Transformation for Elimination of Double-Heterogeneity, YongHee Kim, Jae Man Noh, Won Seok Park *(KAERI)*

The Equivalent Cylinder Models for the Homogenization of Pebble Bed Reactor Cores, Hyun Chul Lee, Kang-Seog Kim, Jae Man Noh, Hyung-Kook Joo *(KAERI)*

Modeling Doubly Heterogeneous Systems in SCALE, Sedat Goluoglu, Mark L. Williams *(ORNL)*

Focus on Communications: Meet the Media–Panel, sponsored by ETD. *Session Organizer:* David Pointer *(ANL)* [Track 1]

PANELISTS:
- Matt Wald *(New York Times)*
- H. Josef Hebert *(Associated Press)*
- Margaret Ryan *(Platts)*
- Additional panelists to be determined.

Essential Results of PSA '05–Panel, sponsored by NISD. *Session Organizer:* Ian Wall *(Consultant)* [Track 3]

PANELISTS:
- William Burchill *(Texas A&M)*
- Craig Smith *(LLNL/NPS)*
- Other panelists to be determined.

U.S. Department of Energy Innovations in Nuclear Infrastructure and Education Research, sponsored by ETD; cosponsored by OPD. *Session Organizer:* Robert Fjeld *(Clemson Univ)* [Track 2]

Impact of the DOE INIE Program on the University of Missouri Research Reactor, John D. Robertson *(Univ of Missouri, Columbia)*

Advances in Radiochemistry Research and Education by WNSA Universities, Alena Paulenova *(Oregon State Univ)*, James Theodore Elliston *(Washington State Univ)*, Ken Ronald Czerwinski *(UNLV)*

Aspects of Neutron Depth Profiling at the University of Texas, Scott Whitney *(Univ of Texas, Austin)*, Steven Biegalski *(Univ of Texas)*, Bradley J. Hurst, David Sean O'Kelly *(Univ of Texas, Austin)*

Phase Contrast Imaging Progress at the MIT NRL, Antonio L. Damato, Gordon Kohse, Richard C. Lanza, Yakov Ostrovsky *(MIT)*

INIE Big-10 Consortium Enabled Research: A New Physical Model of Two-Phase Transport in Polymer Electrolyte Fuel Cells Using Neutron Imaging at Penn State, Matthew M. Mench, Ahmet Turhan, Kevin Heller, Kenan Ünlü, Jack Brenizer, Jr. *(Penn State)*

Design and Testing of a Prototype Slow Positron Beam at the NC State University PULSTAR Reactor, Alfred G. Hathaway, Ayman I. Hawari *(NCSU)*, Mark A. Skalsey, William Friese, Richard Vallery, David W. Gidley *(Univ of Michigan)*, Jun Xu *(ORNL)*

Thermal Hydraulics Code Development and Application—I, sponsored by THD. *Session Organizers:* Joy L. Rempe *(INL)*, Karen Vierow *(Purdue Univ)* [Track 5]

Extended COBRA-TF and Its Application to Non-LOCA Analysis, Chan Eok Park *(KOPEC)*

COBRA-TF Analysis of the High Flux Reactor Hot Channel for a Postulated Large-Break Loss of Coolant Accident, Sule Ergun *(Penn State)*

Prediction of Thermal Mixing by Steam Discharging into Water Tank, Young Seok Bang *(KINS)*

Verification of Whole Core Sub-Channel Analysis in LMR Systems Codes, Floyd Dunn, James E. Cahalan *(ANL)*, Dohee Hahn, Hae-Yong Jeong *(KAERI)*

Architectural Advancements in RELAP5-3D, George L. Mesina *(INL)*

Coupled COBRA-TF/RELAP5-3D Prediction of the LOFT L2-5 Experiment, Jason G. Williams, Lawrence E. Hochreiter *(Penn State)*

Modeling of Dispersed Flow Film Boiling with Two Flow, Five Field Eulerian-Eulerian Approach, Sule Ergun *(Penn State)*

Assessment of TRACE 4.050 Using UPTF Bypass Tests, An-Dong Shin *(KINS)*

Nuclear Analytical Measurements on the Road to Food Safety—II, sponsored by BMD; cosponsored by RPSD, IRD. *Session Organizers:* Rolf Zeisler *(NIST)*, Elisabete A. De Nadai Fernandes *(Univ of São Paulo, CENA)* [Track 7]

Radionuclide Uptakes by Vegetables Cultivated Under Different Agriculture Managements, Fernando Carlos Araujo Ribeiro *(Nucl Energy Natl Commission)*, Dejanira Da Costa Lauria, Ana Cristina Ferreira *(Instituto de Radioproteção e Dosimetria)*, invited

Translocation of Major and Trace Elements in Espresso Coffee Assessed by INAA, Fábio S. Tagliaferro, Elisabete A. De Nadai Fernandes, Marcio Bacchi *(Univ of São Paulo, CENA)*, invited

True Coincidence Correction for INAA of Plant Material Using Well-Type Detector, Adriano Di Piero, Marcio Arruda Bacchi, Elisabete A. De Nadai Fernandes *(Univ of São Paulo, CENA)*, invited

Detection of Irradiated Food by Photostimulated Luminescence Screening System, Abdulraheem A. Kinsara *(King Abdulaziz Univ)*

Lanthanum Detected in Orange Juices: Safe or Dangerous?, Christian Turra, Elisabete A. De Nadai Fernandes, Fábio S. Tagliaferro, Márcio A. Bacchi *(Univ of São Paulo, CENA)*, invited

Concentration of Trace Elements in Human Milk in Jeddah, Saudi Arabia, Saied Farid, Sa'ad Alsaedi, Manal Halawany, Abdulraheem A. Kinsara *(King Abdulaziz Univ)*

Data, Analysis, and Operations for Nuclear Criticality Safety—I, sponsored by NCSD. *Session Organizer:* Robert Frost *(Nucl Safety Assoc)* [Track 3]

Accounting for Precipitation in Tanks with Concentration Control, Robert L. Frost *(Nucl Safety Assoc)*, Harry W. Webb *(Nucl Fuel Svc)*

Accounting for Phase Separation in Tanks with Concentration Control, Robert L. Frost *(Nucl Safety Assoc)*

Personal Annunciation Device (PAD)—A Wireless Technology for CAAS Compensatory Notification, Peter L. Angelo *(Y-12 Natl Security Complex)*

A New Shipping Container Design to Ship HEU Parts from TA-18 to DAF, Debdas Biswas *(Washington SMS)*, Paul Blanton *(Westinghouse SRC)*

Evaluation of Criticality Safety Reference Values—First Iteration, Dennis Mennerdahl *(E M Systems)*

Decontamination of Process Gloveboxes During D&D, David Erickson *(Fluor Fed Svc)*

U.S. Department of Energy Nuclear Engineering Education Research Highlights—II, sponsored by FED. *Session Organizer:* Cindie Jensen *(INL)* [Track 5]

Enhanced Thermal Conductivity for LWR Fuel, Jamil A. Khan, Sujan Pakala, Travis Knight *(Univ of South Carolina)*, James Tulenko *(Univ of Florida)*

Corrosion Performance of Surface Modified Materials for Lead-Cooled Reactors, McLean T. Machut, Kumar Sridharan *(Univ of Wisconsin, Madison)*, Ning Li *(LANL)*, Todd Allen *(Univ of Wisconsin, Madison)*

Dislocation - Radiation Obstacle Interactions: Developing Improved Mechanical Property Constitutive Models, Ian M. Robertson *(Univ of Illinois)*, Brian D. Wirth *(Univ of California, Berkeley)*, Chun-Ming Li, Blythe Gore *(Univ of Illinois)*, J. A. Vandersall *(LLNL)*

On Using Electrochemistry to Predict Activity Transport in PWRs, Jonathan S. Pitt, Digby Macdonald, Mirna Urquidi-Macdonald, John Harlan Mahaffy *(Penn State)*

The Simulation of Electrochemistry to Predict the Accumulated Damages in BWRs, HanSang Kim, Digby Macdonald, Mirna Urquidi-Macdonald *(Penn State)*

Results to Date on Radiolytically-Induced Novel Materials, Akira T. Tokuhiro, Massimo Bertino, Tadashi Tokuhiro, Nicholas Leventis *(Univ of Missouri, Rolla)*

Short-Term Rupture and Biaxial Creep Studies of Recrystallized Zircaloy-4, Brian W. Marple, Indrajit Charit, Jinyuan Yan, Srikant Gollapudi, K. L. Murty *(NCSU)*

Regulatory Update–Panel, sponsored by DDRD. *Session Organizer:* Tracy Goble *(Consumers Energy)* [Track 6]

PANELISTS:
- Dan Gillen *(NRC)*
- Gerry VanNoordennen *(Connecticut Yankee)*
- Larry Zull *(DNFSB)*
- Additional panelists to be determined.

WEDNESDAY, NOVEMBER 16, 2005 • 1:00 P.M.

Evaluation of Recent Transmutation Scenarios for Partitioning/Transmutation of Actinides and Heat-Generating Fission Products, sponsored by FCWMD. *Session Organizer:* Charles Forsberg *(ORNL)* [Track 6]

Advanced Fuel Cycle Scenarios for Nuclear Waste Management, Mark T. Peters, Abdellatif M. Yacout, Robert N. Hill *(ANL)*

Methodology for Uncertainty Analysis of Advanced Fuel Cycles and Preliminary Results, Laurence Miller *(Univ of Tennessee)*, Luc Durpel, Abdellatif M. Yacout *(ANL)*, Fred Mynatt, Gary Sweder, Thomas Anderson *(Univ of Tennessee)*, Bob Hill *(ANL)*

A Deep-Burn, Gas-Cooled Fast Transmutation Reactor, Weston M. Stacey, James W. Maddox *(Georgia Tech)*

A Once Recycle Commercial Waste Disposition Fuel Cycle Utilizing Thorium, Samuel E. Bays *(INL)*

Thorium MOX as a Plutonium and Transuranic Disposition Matrix—A Fresh Look, Samuel E. Bays, J. Stephen Herring, Benjamin Schmitt, Andrew Goldmann *(INL)*

Thermodynamic Simulation of Brine Chemistry on Repository High-Level Waste, Tae M. Ahn *(NRC)*, Roberto Pabalan, Vijay Jain, Lietai Yang *(Southwest Research Inst)*

Environmental Impact of Yucca Mountain Repository, Joonhong Ahn, Leah M. Ackerman *(Univ of California, Berkeley)*

Digital Upgrade Issues in an Evolving Technical and Regulatory Environment, sponsored by OPD. [Track 2]

I&C Current and Future Challenges and Opportunities, Joseph Albert Naser II *(EPRI)*

Hybrid Control Rooms—New Guidelines for Addressing Design and Regulatory Issues, James Douglas Hill *(MPR Assoc)*, Robert T. Fink *(CDF Svc)*, Joseph Albert Naser II *(EPRI)*

Integrated Approach to I&C Strategic Modernization, Randall May *(Consultant)*, Kenneth Scarola *(Nucl Automation)*, Raymond Torok *(EPRI)*

An Assessment of the Value of Defense-in-Depth and Diversity in Digital I&C Systems, Dave Blanchard *(Applied Reliability Eng)*, Raymond Torok *(EPRI)*

Re-Evaluating the Software Paradigm for Digital I&C Systems, Charles M. Waite *(Process Design Consultants)*, Roger D. Horn *(Univ of Tennessee)*

A Parametric Study on the Capabilities of Remote Visual Testing for the Nuclear Industry, Stephen E. Cumblidge, Michael T. Anderson, Steven R. Doctor *(PNNL)*

Disposition of Low-Activity Radioactive Waste–Panel, sponsored by ESD. *Session Organizer:* S. Y. Chen *(ANL)* [Track 3]

PANELISTS:
- David Allard *(Commonwealth of Pennsylvania)*
- Garry Benda *(RACE, LLC)*
- Scott Flanders *(NRC)*
- Christine Gelles *(DOE)*
- Daniel Schultheisz *(EPA)*
- John Wiley *(The Natl Academies)*

Computational Methods: General—I, sponsored by MCD. *Session Organizer:* Todd Palmer *(Oregon State Univ)* [Track 5]

A Potential Issue Involving the Application of the Unit Base Transformation to the Interpolation of Secondary Energy Distributions, Thomas M. Sutton *(KAPL)*, Timothy H. Trumbull *(Lockheed Martin)*

Convergence Criteria of Inactive Cycle Monte Carlo Calculations, Hyung Jin Shim, Chang Hyo Kim *(Seoul Natl Univ)*

Intergenerational Correlations in Monte Carlo Neutronics Calculations, Hyung Jin Shim, Chang Hyo Kim *(Seoul Natl Univ)*

Extension of MacMillan's Approach to Autocorrelation Estimation of Monte Carlo Fission Sources, Taro Ueki, Brian Robert Nease *(Univ of New Mexico)*

Biased Reaction Branching Variance Reduction for Monte Carlo Isotopic Inventory Methods, Phiphat Phruksarojanakun, Paul Wilson *(Univ of Wisconsin, Madison)*

Models for the Interpretation of Local Flux Measurements in Subcritical Systems, Sandra Dulla *(Politecnico di Torino)*, Matteo Rostagno *(ENEA-Bologna)*, Piero Ravetto *(Politecnico di Torino)*

Advances in Reactor Physics Analysis and Design of High-Temperature Reactors—III, sponsored by RPD. *Session Organizer:* Taek Kyum Kim *(ANL)* [Track 8]

Sensitivity Study of Design Parameters for Liquid-Salt-Cooled VHTR, Taek Kim, Temitope Taiwo, Wonsik Yang, G. Palimottti *(ANL)*

Sensitivity and Uncertainty Assessment of Coolant Void Reactivity Coefficient for Liquid-Salt-Cooled VHTR, Gerardo Aliberti *(ANL)*

Reactivity Void Coefficient Study for Molten Salts in an AHTR, William A. Casino, Jr. *(AREVA, Framatome ANP)*, William Anderson *(Framatome ANP)*, Richard Kochendarfer *(AREVA, Framatome ANP)*

Physics Analysis of Coolant Voiding in the Advanced High-Temperature Reactor (AHTR), Kevin Clarno, Jess C. Gehin, Charles Forsberg *(ORNL)*

Prismatic Very High Temperature Reactor Physics Studies in Support of TRISO-Coated Fuel Particle Specification and Core Design Simplification, James William Sterbentz *(INL)*

Spectral Effects in the Breeding Process of the ^{235}U-Thorium Fuel for High Temperature Gas Reactors, Alberto Talamo, Waclaw Gudowski *(KTH)*

Design and Modeling of HTGFR Using ORNL Low Density Graphite Foam, Eric A. Burgett, Dwayne P. Blaylock, Ratib A. Karam, Nolan E. Hertel *(Georgia Tech)*

Innovations in Nuclear Engineering Education, Training, and Distance Learning, sponsored by ETD. *Session Organizer:* Brian K. Hajek *(Ohio State)* [Track 2]

The New Center for Advanced Energy Studies (CAES), Leonard J. Bond *(INL)*, Robert Wharton *(Idaho State Univ)*, Andrew Kadak *(MIT)*

Essay Contest on the Beneficial Applications of Nuclear Science and Technology—A Recipe for Success, Blair P. Bromley *(Canadian Nucl Society/ Chalk River Branch)*

The Livermore Summer Course in Non-Proliferation, Edward Morse *(Univ of California, Berkeley)*, Dan Archer, Nancy Hutcheon, Thomas Gosnell, Thomas H. Isaacs, Simon E. Labov, Christie Shannon *(LLNL)*, Stephen E. Binney *(Oregon State Univ)*

A New Nuclear Engineering Program in the Idaho Universities, Mary Lou Dunzik-Gougar *(Idaho State Univ)*, Michael Lineberry *(INL Ctr for Advanced Energy Studies)*, Jay F. Kunze, John S. Bennion *(Idaho State Univ)*

Graduate Level Distance Education in Nuclear Engineering at Penn State University, Lawrence E. Hochreiter *(Penn State)*

Distance Learning in the Nuclear Engineering and Radiation Health Physics Department: A Status Report, Stephen E. Binney, Todd S. Palmer, Kathy A. Higley *(Oregon State Univ)*

Online Learning is Greater than WBT, Lorraine F. NewHaven *(Westinghouse)*

Using Full-Scale Virtual Mockups for Nuclear Power Plant Training, Vaughn Eugene Whisker III, Timothy S. Shaw, Anthony J. Baratta *(Penn State)*

Emerging Topics in Nuclear Installation Safety Technology, sponsored by NISD. *Session Organizer:* Dana A. Powers *(SNL)* [Track 3]

NPP License Renewal and Aging Management: Lessons Learned Halfway Through, Amy Hull, Jerry Dozier *(NRC)*, Omesh K. Chopra *(ANL)*

The Significant Enhancement in Construction Sequence of Optimized Pressurized Reactor 1000+ in Korea with Area Completion, Jinwon Kim *(KOPEC)*

Safety Software Guide Perspectives for the Design of New Nuclear Facilities (U), Kevin O'Kula *(Washington SMS)*, Debra Sparkman *(DOE)*

Water Vapor Leak Imaging by Wavelength Modulation Spectroscopy, Chris Hovde, Shin-Juh Chen, Mark Paige *(Southwest Sciences)*

Use of Fuel Cells to Power a High-Reliability GFR ECCS, Derya Akkaynak, Michael J. Driscoll, Pavel Hejzlar, George Apostolakis, Michael W. Golay, Ernest G. Cravalho *(MIT)*

Effect of Radiation Heat Transfer in Loss-of-Offsite Power (LOOP) Transients for Material Irradiation Capsules in the HFIR, Juan J. Carbajo *(ORNL)*

Materials and Methods for the Reduction of Backscattered X-Rays, Abdulraheem A. Kinsara *(King Abdulaziz Univ)*

Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—I, sponsored by IRD. *Session Organizer:* Kenan Ünlü *(Penn State)* [Track 7]

Installation and Testing of the Neutron Powder Diffractometer at the NC State University PULSTAR Reactor, Ronald R. Berliner, Ayman I. Hawari *(NCSU)*

Water Quantification Using Neutron Imaging, Arthur Kevin Heller, Abel Chuang, Jack Brenizer, Jr., Kenan Ünlü *(Penn State)*, invited

Enhancing Reactor Facility Utilization at the University of Missouri-Rolla Reactor, Akira T. Tokuhiro, William Bonzer, Daniel Estel, Brian Porter *(Univ of Missouri, Rolla)*

Design and Applications of an Ultra Cold Neutron Source at the NC State University PULSTAR Reactor, Ekaterina Korobkina, Bernard W. Wehring, Ayman I. Hawari, Albert R. Young, Paul Huffman, Robert Golub, Yanping Xu *(NCSU)*

A Comparison of Charged Particle Detectors Using Neutron Depth Profiling, Michael E. Peretich *(James Madison Univ)*, R. Gregory Downing *(NIST)*, invited

Design of the New Analytical Cold-Neutron Beam Line at NCNR, Richard Lindstrom, Christoph Brocker, Elizabeth Mackey, R. Gregory Downing *(NIST)*

Thermal Hydraulics Code Development and Application—II, sponsored by THD. *Session Organizers:* Joy L. Rempe *(INL)*, Karen Vierow *(Purdue Univ)* [Track 5]

Multiple Parallel Solvers in a CFD Code Using PETSc, Daniel T. Rock, Rizwan-uddin *(Univ of Illinois)*, Constantine P. Tzanos *(ANL)*

Evaluation of Minimum Droplets Size on Cladding Temperature During Reflood, C. K. Nithianandan, John R. Biller *(AREVA)*

The Effect of Boundary and Initial Conditions on the Transport of Scalar in a Turbulent Developing Flow Through a Straight Tube, V. Vishnu Karthik, Yassin Hassan, A. R. McFarland *(Texas A&M)*

Preliminary Uprate Study of the University of Missouri-Rolla Reactor, Akira T. Tokuhiro, Chris Carroll *(Univ of Missouri, Rolla)*

Developing a Fully Integrated Training System for Severe Accident Management Using the MELCOR Code, Ko Ryu Kim, Sun Hee Park, Dong-Ha Kim *(KAERI)*

A Restructuring of the MELCOR HS Package for the MIDAS Computer Code, Ko Ryu Kim, Sunhee Park, Dong-Ha Kim I *(KAERI)*

Radiation Protection and Shielding: General, sponsored by RPSD. [Track 5]

Analysis of Emulsion Coating Effectiveness for Beta Particle Attenuation, Charles A. Sparrow, Donna Rogers *(Mississippi State Univ)*, Victor F. Medina *(U.S. Army Corps of Engineers)*

Determining Heavy Ion Fragmentation Cross Sections by the Use of Weak Factorization, John R. Edwards IV, Lawrence W. Townsend *(Univ of Tennessee)*

Thermal Neutron Collimated Beam Line, Eric A. Burgett, Nolan E. Hertel, Bill Lee *(Georgia Tech)*

MCNP Model of the Semiconductor Device Characterization Vessel in BP1 of the OSURR, Joshua Sroka, Thomas Blue, Andrew C. Kauffman *(Ohio State)*

Predictions of Radiation Damage in SiC Neutron Power Monitors in IRIS, David Berens, Behrooz Khorsandi, Benone Lohan, Thomas Blue, Don W. Miller *(Ohio State)*

Radiation Damage in SiC Neutron Power Monitors in the GT-MHR, Thomas Blue, Benone Lohan, Behrooz Khorsandi, Don W. Miller *(Ohio State)*

Glovebox Glove Optimization, Sheldon Landsberger *(Univ of Texas, Austin)*, Matthew Alden Griffin *(Univ of Texas)*, Michael Cournoyer *(LANL)*

Data, Analysis, and Operations for Nuclear Criticality Safety—II, sponsored by NCSD. *Session Organizer:* Bob Wilson *(DOE)* [Track 3]

Validation of XSDRN Using Selected OECD U-235 Benchmark Experiments, Ed Kendall *(NNSA Y-12 Site Office)*, Robert H. Smith *(BWXT Y-12)*, Ronald E. Pevey *(Univ of Tennessee)*

Determination of Consistent Benchmarks Use for Nuclear Criticality Safety Analysis Applications, Calvin M. Hopper *(ORNL)*, J. J. Wagschal *(Hebrew Univ of Jerusalem)*

Critical Mass Experiments with Uranium and Polyethylene, Rene G. Sanchez, David J. Loaiza, Robert Kimpland *(LANL)*

Using the SCALE 5 TSUNAMI-3D Sequence in Critical Experiment Design, Donald Mueller *(ORNL)*, Gary A. Harms *(SNL)*

ENDF/B Cross-Section Evolution for Criticality Safety Burnup Credit Applications, Douglas G. Bowen *(LANL)*

Comparison of Subcritical Measurements from SILENE with Calculated Results, Bernard Verrey, Boukmes Mechitoua *(CEA)*

Bounding Domains for Validation of Criticality Safety Calculations, Burton Rothleder *(DOE)*

Demonstration of Benchmark Adequacy for CSAS26 for the US MOX Fuel Fabrication Facility, Robert Foster, James Bazley *(Duke COGEMA Stone & Webster)*

U.S. Department of Energy Nuclear Engineering Education Research Highlights—III, sponsored by FED. *Session Organizer:* Cindie Jensen *(INL)* [Track 5]

Model Predictive Control of Space Nuclear Reactor Systems, Belle R. Upadhyaya, Ke Zhao, Xiaojia Xu *(Univ of Tennessee)*, Man Gyun Na *(Chosun Univ–South Korea/Univ of Tennessee)*

Novel Photocatalytic Energy Converter for Nuclear Safeguards Applications, Douglas Kinsman, John R. White, Leo Bobek, Thomas Michael Regan *(Univ of Massachusetts Lowell)*

Direct Simulation Monte Carlo Aerosol Dynamics III: Agglomeration and Source Reinforcement, Geethpriya Palaniswaamy, Sudarshan Kumar Loyalka *(Univ of Missouri, Columbia)*

Scattered Neutron Tomography Based on a Neutron Transport Inverse Problem, Scipolo Vittorio, William S. Charlton *(Texas A&M)*

Development of a Pyroelectric Neutron Source, Yaron Danon, Jeffrey Geuther *(RPI)*

Status of an Inverse Approach for Normal and Coincidence PGNAA, Xiaogang Han *(North Carolina Central Univ)*, Robin P. Gardner *(NCSU)*

Determination of Hydrogen Content by PGAA in Lithium Ion Battery Cathode Materials, Emilio Alvarez II, Arumugum Manthiram, Steven Biegalski, Sheldon Landsberger *(Univ of Texas, Austin)*

U.S. Department of Energy Cleanup Program Update–Panel, sponsored by DDRD. *Session Organizers:* Mark Morton *(Polestar Applied Technol)*, William Franz *(Los Alamitos Tech Assoc)* [Track 6]

PANELISTS:

- 107N FSB Water Treatment Facility D&D at Hanford, a Betchel Hanford representative to be determined.
- The Effects of Beryllium Contamination on D&D in Hanford 300 Area, a Bechtel Hanford representative to be determined.
- Savannah River Site Closure: An Overview, a Polestar representative to be determined.
- Explosive Demolition of Test Cell A, a Bechtel Nevada representative to be determined.

THURSDAY • NOVEMBER 17, 2005

7:30 A.M. - 2:00 P.M. — **MEETING REGISTRATION**

8:30 A.M. - 5:00 P.M. — **PROFESSIONAL DEVELOPMENT WORKSHOP #3**
"Development and Application of ANS Standards"

8:30 A.M. - 11:30 A.M. — **2005 ANS WINTER MEETING TECHNICAL SESSIONS**

- Separations and Fuel Fabrication Technologies for Advanced Fuel Cycles
- Advanced Nuclear Energy Systems Including Nuclear Power 2010: Research and Development
- Climate Policy in the U.S. Senate–Panel
- Computational Methods: General—II
- Reactor Analysis Methods
- Focus on Communications: Communications is Science, Too–Panel
- Nuclear Facility Risk Analysis
- Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—II
- Thermal Hydraulics of Generation IV Reactors
- Nuclear Criticality Safety Standards–Forum
- Nuclear Fuel Performance Modeling and Benchmarking
- Hot Topics and Emerging Issues–Panel

1:00 P.M. - 4:00 P.M. — **2005 ANS WINTER MEETING TECHNICAL SESSIONS**

- Advanced Head-End Improvements for Procesing Spent Nuclear Fuels and Recycling
- Modeling and Transportation of Radiation in the Environment—II
- Human Factors: General
- Reactor Physics Design, Validation, and Operating Experience
- Focus on Communications: Speaking to the Media–Panel
- Low-Energy Nuclear Reactions
- Thermal Hydraulics: Computational Fluid Dynamics and Heat Transfer
- Communicating with Your Congressperson or Senator–Panel
- Gas Reactor Fuels and Materials
- Lessons Learned from Near-Complete Decommissionings–Panel

THURSDAY, NOVEMBER 17, 2005 • 8:30 A.M.

Separations and Fuel Fabrication Technologies for Advanced Fuel Cycles, sponsored by FCWMD. *Session Organizer:* M. Williamson *(ANL)* [Track 6]

Economics, Repository Impact, and Proliferation Resistance Comparisons of Fuel Cycle Concepts, Jun Li, Man-Sung Yim *(NCSU)*, David Nicholas McNelis *(Univ of North Carolina, Chapel Hill)*

Development of the UREX+2 Flowsheet—An Advanced Separations Process for Spent Fuel Processing, Emory D. Collins, Dennis Benker, L. Felker, Robin D. Taylor *(ORNL)*, Guillermo Daniel Del Cul *(ORNL/UT-Battelle)*, Barry Spencer, Walt D. Bond, David O. Campbell *(ORNL)*

Electrochemical Co-Collection of Uranium and Zirconium in Mk-IV Electrorefiner for Treating Spent EBR-II Driver Fuel, Shelly X. Li, Thomas A. Johnson, Brian R. Westphal, K. Michael Goff, Robert W. Benedict *(INL)*

Zirconium Matrix Cermet Storage Form and Transmutation Fuel for Transuranics, Sean M. McDeavitt, Dustin Kraemer, Adam Parkinson, Aaron Totemeier, Jeff Wegener *(Purdue Univ)*

Reliability Analysis of a Robotic Workcell for Transmuter Fuel Fabrication, Georg F. Mauer, Jamil Renno *(UNLV)*

Light Water Reactor Transmutation Fuel Irradiation Experiment (LWR-2), William J. Carmack, Debra J. Utterbeck *(INL)*

Advanced Nuclear Energy Systems Including Nuclear Power 2010: Research and Development, sponsored by OPD. [Track 2]

Power Shaping of a Long-Lived GFR Core Using Diluents, Christopher S. Handwerk, Michael J. Driscoll, Pavel Hejzlar, Peter Yarsky, Michael A. Pope *(MIT)*

Comparison of AREVA's EPR with a Conventional 4-Loop PWR, Meghan McCloskey, Jennifer Butler, Kevin Barber *(Penn State)*

Nuclear Hydrogen Production and Coal Gasification Electricity Generation, Jay F. Kunze *(Idaho State Univ)*, Gary M. Sandquist *(Univ of Utah)*

Evaluation of Uncertainty Analysis Techniques, J. Wesley Hines *(Univ of Tennessee)*, Steven A. Arndt *(NRC)*, Dustin Garvey, Becky Seibert, Alexander Usynin *(Univ of Tennessee)*

Neural Network Mass Inventory Estimator for Feed Control in Helical Steam Generators, J. Doster, Hengliang Shen *(NCSU)*

HTP-LE Fuel for the EPR: Proven Technology for Advanced Reliability, Bernie Copsey, Eric Francillon, Horst-Dieter Kiehlmann *(AREVA)*

Climate Policy in the U.S. Senate–Panel, sponsored by ESD. *Session Organizer:* Eric Loewen *(INL)* [Track 3]

This session will feature various congressional staff members who will discuss climate policy in the 109th Congress. Each panelist will share their perspectives on various climate legislation put forth to Congress. The Hagel-Pryor climate amendment became a part of the Senate Energy Bill and was later reported out of Senate-House Energy Conference. Other climate legislative approaches such as those by Senators McCain and Lieberman and Senator Bingaman will also be discussed.

PANELISTS:
Members of the staffs of U.S. Senators.

Computational Methods: General—II, sponsored by MCD. *Session Organizer:* Todd Palmer *(Oregon State Univ)* [Track 5]

Escape Probabilitites in X-Y-Z Geometry, Roberto D. M. Garcia *(HSH Scientific Computing)*

Implementation of an On-Line Reactor Power Monitoring System Using CTPS, Mihaela Biro, Tunc Aldemir *(Ohio State)*

Screening Technique for Loading Pattern Optimization by Simulated Annealing, Tong Kyu Park *(Seoul Natl Univ)*, Hyun Chul Lee, Hyung-Kook Joo *(KAERI)*, Chang Hyo Kim *(Seoul Natl Univ)*

Coupling of a 2-D Nodal Method to Parallel Boiling Channels, Miguel Cecenas-Falcon *(IIE)*, Edmundo Del Valle *(IPN)*, Rina Margarita Campos-Gonzalez *(IIE)*

Discrete Ordinates Singular Characteristic Tracking Algorithm, Jose Ignacio Duo, Yousry Youssef Azmy *(Penn State)*

Adaptive hp- Mesh Refinement Applied to 1-D, One-Group Diffusion Problems, Jean C. Ragusa *(Texas A&M)*

Identification of Unknown Densities in a Source/Shield System Using the Schwinger Inverse Method, Jeffrey A. Favorite *(LANL)*

An Iterative Method for Simulation of Dynamic Behavior in Fast Burst Reactors, Stephen C. Wilson, Steven Biegalski *(Univ of Texas, Austin)*

Reactor Analysis Methods, sponsored by RPD. [Track 5]

Effect of Anisotropic Scattering in PWR/APWR Radial-Reflector Calculations, Akio Yamamoto *(Nagoya Univ)*, Naoki Sugimura, Tadashi Ushio *(Nucl Eng)*

Three-Dimensional Cross-Section Generation for TRIGA Core Analysis, Nateekool Kriangchaiporn, Kostadin Ivanov *(Penn State)*, Alireza Haghighat *(Univ of Florida)*, Frederick C. Sears *(Penn State)*

LWR Equilibrium Cycle Search Methodology for Global Fuel Cycle Analysis, Reuben T. Sorensen, John C. Lee *(Univ of Michigan)*

The Analytic Function Expansion Nodal (AFEN) Method in Cylindrical (r,θ,z) Geometry for Pebble Bed Reactors, Nam Zin Cho, Joo Hee Lee, Jaejun Lee *(KAIST)*, Do Sam Kim *(KINS)*

Exploration of Mathematical Methods for Fine Group Reconstruction, Nathanael Hudson, Farzad Rahnema *(Georgia Tech)*, Abderrafi Ougouag, Hans Gougar *(INL)*

Burnup Dependent Core Calculations Via MCNP-4b, Aydın Karahan, Mehmet Tombakoğlu *(Hacettepe Univ)*

Focus on Communications: Communications is Science, Too–Panel, sponsored by ETD. *Session Organizer:* David Pointer *(ANL)* [Track 1]

With increasing public interest in nuclear science and technology issues, the nuclear professional's ability to deliver clear, audience-appropriate messages is essential to effective communications with the media and the public. This session seeks to recognize the value and application of scientific methods in tailoring effective messages for target audiences as well as improving the likelihood that these messages will be distributed, regardless of the media form. While tailoring and distributing messages are very different specializations, professionals across the field rely on communications science to guide the messages, polls, and advertising they deliver. This session will provide a forum for communications professionals to describe the process they use to convert research and technical information into actionable evidence to form messages and deliver meaningful content to the public.

Panelists to be determined.

Nuclear Facility Risk Analysis, sponsored by NISD. *Session Organizer:* Stephen P. Schultz *(Duke Energy)* [Track 3]

Risk Significance of HEMYC® Electrical Raceway Fire Barrier System Failures, Raymond H. V. Gallucci *(NRC)*

Using Virtual Engineering Tools to Assess Fire Scenario Hazards, David J. Muth, Jr., Kenneth M. Bryden *(Iowa State Univ)*, David J. Buell *(OPPD)*

Development of a Standard HRA Method for PSA, Daeil Kang, Wondea Jung, Jaewhan Kim, Seungchul Jang *(KAERI)*

On the Use of Importance Measure in Option 2, Kilyoo Kim *(KAERI)*

Grand Gulf Filter Impacts with the Alternative Source Term, Gregory Broadbent *(Entergy)*

Preliminary Analysis on Chemical Compositions Following a Loss-of-Coolant Accident, Jinsuo Zhang, Marc Clasky, Mei Ding *(LANL)*, Dong Chen *(Univ of New Mexico)*, Jack Dallman, Bruce Letellier *(LANL)*

Impact of Innovations in Nuclear Infrastructure and Education on University Research Reactors—II, sponsored by IRD. *Session Organizer:* Kenan Ünlü *(Penn State)* [Track 7]

Operational Benchmarks for a Monte Carlo Model of the University of Wisconsin Nuclear Reactor, Paul Humrickhouse, Paul Wilson *(Univ of Wisconsin, Madison)*

Research and Virtual Reactor Design at UIUC, John Griffith, Jianwei Hu, Rizwan-uddin *(Univ of Illinois)*, invited

Design and Testing of a Neutron Imaging Facility at the NC State University PULSTAR Reactor, Kaushal Mishra, Ayman I. Hawari, Victor H. Gillette *(NCSU)*

Determination of Power Peaking Factors for Replacement Fuel for the PULSTAR Reactor at NCSU, Laurence Miller, Ronald E. Pevey, Matthew Miller *(Univ of Tennessee)*, Ayman I. Hawari *(NCSU)*

Neutron Radiography Development at The University of Texas at Austin TRIGA Reactor, Steven Biegalski *(Univ of Texas)*, Lei Cao *(Univ of Texas, Austin)*, Derek Anderson Haas *(Univ of Texas)*, David Sean O'Kelly *(Univ of Texas, Austin)*

The Use of k0 Factors in Cold Neutron Prompt Gamma-Ray Activation Analysis, Rick Lee Paul *(NIST)*, invited

Thermal Hydraulics of Generation IV Reactors, sponsored by THD. *Session Organizers:* Robert Martin *(AREVA)*, Kune Suh *(Seoul Natl Univ)* [Track 5]

Normal and Deteriorated Heat Transfer Correlations for Supercritical Fluids, Sun-Kyu Yang, Hussam Khartabil *(AECL)*

AREVA's Activities Related to VHTR Thermal-Hydraulic Analysis Using RELAP5-3D, Robert P. Martin *(Framatome ANP)*

Thermal Hydraulic Analysis of a Gas Test Loop System, Donna P. Guillen, James E. Fisher *(INL)*

Optimized Battery-Type Reactor Integral System Design for Sustainable Energy Development, Il-Suk Lee, Myoung Sung Sohn, Kune Yull Suh *(Seoul Natl Univ)*

Advanced Intermediate Heat Transfer Loop Design Configurations for Hydrogen Production Using High Temperature Nuclear Reactors, Chang H. Oh, Cliff Davis *(INL)*

Supercritical Water Heat Transfer, Jeremy R. Licht, Mark H. Anderson *(Univ of Wisconsin, Madison)*

Performance Analysis of Gas-Injection Enhanced Natural Circulation in STAR-LM, Yeon-Jong Yoo, Qiao Wu, Jose N. Reyes, Jr. *(Oregon State Univ)*, James Joseph Sienicki *(ANL)*

Linear Stability Analysis of Gas-Injection Enhanced Natural Circulation in STAR-LM, Yeon-Jong Yoo, Qiao Wu, Jose N. Reyes *(Oregon State Univ)*, James Joseph Sienicki *(ANL)*

Nuclear Criticality Safety Standards–Forum, sponsored by NCSD. *Session Organizer:* John A. Schlesser *(Washington SMS)* [Track 3]

Nuclear Fuel Performance Modeling and Benchmarking, sponsored by MSTD. [Track 6]

Performance Modeling of Enhanced Thermal Conductivity Oxide Fuel Rods, Kevin McCoy, Claude Mays *(Framatome ANP)*

RECON-T: REdistribution of CONstituents in a Ternary U-Pu-Zr Fuel, Yeon Soo Kim *(ANL)*, Steven Hayes *(INL)*, Gerard Hofman, Latif Yacout *(ANL)*

FRAPTRAN Predictions of Cladding Failure in Accident Conditions, Kenneth J. Geelhood, Carl E. Beyer *(PNNL)*

FRAPCON-3 Corrosion Models for M5™ and ZIRLO™ PWR Cladding, Donald D. Lanning *(PNNL)*

First Principle Plane-Wave Pseudopotential Calculation of Point Defects in PuO2-X, Kenji Konashi *(Tohoku Univ)*, Masato Kato *(JNC)*, Satoshi Minamoto *(CRC Sol)*

Hot Topics and Emerging Issues–Panel, sponsored by DDRD. *Session Organizer:* John Parkyn *(Private Fuel Storage)* [Track 6]

PANELISTS:

- Disposal of Class B and Class C Low-Level Waste, George Antonucci *(Duratek)*
- Offsite Storage of Spent Fuel, John Parkyn *(Private Fuel Storage)*
- Reducing Decommissioning and Decontamination Costs, Jim Muckerheide *(Radiation Science and Health)*
- One additional panelist to be determined.

THURSDAY, NOVEMBER 17, 2005 • 1:00 P.M.

Advanced Head-End Improvements for Processing Spent Nuclear Fuels and Recycling, sponsored by FCWMD. *Session Organizer:* G. D. Del Cul *(ORNL)* [Track 6]

Advanced Head-End Processing of Spent Fuel: A Hybrid Front-End, Guillermo Daniel Del Cul *(ORNL/UT-Battelle)*, Rodney D. Hunt, Barry Spencer, Emory D. Collins *(ORNL)*

Processing of Spent TRISO-Coated Reactor Fuels: Mechanical Head-End for Grind-Leach Process, Barry Spencer *(ORNL)*, Guillermo Daniel Del Cul *(ORNL/UT-Battelle)*, Catherine Helene Mattus, Emory D. Collins *(ORNL)*

Acid Treatment of Zeolite for Krypton Gas Adsorption, Jin-Myeong Shin I, Jang-Jin Park, Myung Seung Yang *(KAERI)*

DRY Disposition of Surplus Nuclear Material, Loretta H. Arbogast *(Nucl Fuel Svc)*

Recycling Facility for HE UF6 & Other Legacy HEU Materials, Michael A. Rush *(Nucl Fuel Svc)*

Modeling and Transportation of Radiation in the Environment—II, sponsored by ESD. [Track 3]

MCNP5 Shielding Evaluations of the NUHOMS-24P at the Oconee ISFSI, Dominic George Napolitano *(NISYS)*, Herschel Pressley Smith *(Duke Power)*

MCNP5 Dose Rate Evaluations of the Oconee ISFSI, Dominic George Napolitano *(NISYS)*, Herschel Pressley Smith *(Duke Power)*

The Environmental Radiation Dose Assessment by a Mobile ERM System, Hee Reyoung Kim *(KAERI)*

GIS Tools for Environmental Restoration Analyses in Site Decommissioning, Allen J. Gross, Gerry L. Stirewalt, James C. Shepherd *(NRC)*

An Assessment of the Codes Used to Model Radionuclide Release, Rheila Dantzler, Tica Valdes *(SCSU)*

Human Factors: General, sponsored by HFD. [Track 2]

Conceptual Model for Computerized In-Field Nuclear Plant Procedures, Nicholas James DiFrancesco, Brian Hajek *(Ohio State)*

Development of Methodology for the Evaluation of Relationship Between Safety Culture and Safety Performance, Youngsuk Bang, Chansoo Kim, Yong Suk Lee, Chang Hyun Chung, Ji Hwan Jeong *(Seoul Natl Univ)*

Project to Update Section 2, "Generic Knowledges and Abilities," of NUREG-1122, Valerie E. Barnes *(Performance Safety & Health)*, Charles W. Sawyer *(McGuire Nucl Station)*

Insights into the Role of the Operator in Advanced Reactor Systems, John M. O'Hara *(BNL)*, J. J. Persensky, Paul Lewis *(NRC)*

A New Hybrid Network for Operator Supporting, Kun Mo, Jitae Kim, Poong Hyun Seong *(KAIST)*

Human Cognitive Process Based Operator Support System Design, Seung Jun Lee, Jitae Kim, Poong Hyun Seong *(KAIST)*

Reactor Physics Design, Validation, and Operating Experience, sponsored by RPD. [Track 5]

Investigation of Increased HEU Loading on the Fuel Cycle of the High Flux Isotope Reactor, Ned Xoubi, G. Ivan Maldonado *(Univ of Cincinnati)*, Trent Primm *(ORNL)*

Validation of Improved 3D ATR Model, Soon Sam Kim, Bruce G. Schnitzler *(INL)*

Designing a Gas Test Loop for the Advanced Test Reactor, Jim Parry *(INL)*

Accuracy Evaluation of Pin Exposure Calculations in Current LWR Core Design Codes (Phase 2), Vuyani Xulubana, Chanatip Tippayakul, Kostadin Ivanov, Samuel Levine *(Penn State)*, Moussa Mahgerefteh *(Exelon)*

Within-Pin ^{238}U-Capture Distributions: CASMO-4 and MCNP vs. Activation Foil Measurements, Kristina Macku, Fabian Jatuff, Michael F. Murphy, Peter Daniel Grimm *(Paul Scherrer Inst)*, Om Parkash Joneja *(Paul Scherrer Inst, EPFL)*, Rakesh Chawla *(Paul Scherrer Inst)*

Neutronics Design of a Erbia Bearing Super High-Burnup Fuel Assembly for Pressurized Water Reactors, Atsushi Shimoura *(Nucl Eng)*

Optimization of Aluminum-Metal Fueled Fast Reactor Cores for Inherent Safety, Tsugio Yokoyama *(AITEL)*, Moriyasu Tokiwai *(CRIEPI)*, Hisashi Ninokata, Hiroshi Endo *(Tokyo Inst of Technol)*

Optimum Core Size vs. Fuel Volume Fraction of a Long-Life Pb-Cooled Fast Reactor, Sang Ji Kim *(KAERI)*, Won Sik Yang, James Joseph Sienicki *(ANL)*

Focus on Communications: Speaking to the Media–Panel, sponsored by ETD. *Session Organizer:* David Pointer *(ANL)* [Track 1]

PANELISTS:
- Mimi Limbach *(Potomac Communications Grp)*
- Keith Arterburn *(INL)*
- Penny Phelps *(AREVA)*
- One additional panelist to be determined.

Low-Energy Nuclear Reactions, sponsored by IRD. *Session Organizer:* Bob Smith *(Oakton Int)*. All invited. [Track 7]

Nuclear Reaction Pathways Resulting from Phonon Interactions, Peter Laurence Hagelstein *(MIT)*

Evidence for Intense Soft X-Ray Emission from a Hydride Target Undergoing Intense Deuteron Bombardment, George H. Miley *(Univ of Illinois)*

Dual Ohmic Controls Improve Understanding of "Heat After Death," Mitchell R. Swartz, Gayle Verner *(JET Thermal Products)*

Bose-Einstein Fusion Mechanism for Low-Energy Nuclear Reaction and Transmutation Processes in Micro- and Nano-Scale High-Density Deuteron Plasmas, Yeong E. Kim *(Purdue Univ)*

Coherent Zener Breakdown and Tunneling in Finite Lattices: Why Nano-Scale PdD Crystals Can Turn-on Faster, Scott R. Chubb, Sr. *(Research Systems)*

Three Types of dd Fusion, Talbot Chubb *(Research Physicist)*

Low Energy Nuclear Reactions, David J. Nagel *(George Washington Univ)*

Thermal Hydraulics: Computational Fluid Dynamics and Heat Transfer, sponsored by THD. *Session Organizers:* Yassin Hassan *(Texas A&M)*, Hisashi Ninokata *(Tokyo Inst of Technol)* [Track 5]

CFD Validation of Flow Regimes in an Idealized Lower-Plenum Model, Joshua Hodson, Eric Thorson, Robert Spall, Barton Smith *(Utah State Univ)*

Thermocouples for High Temperature In-Pile Testing, Joy L. Rempe, Darrell Knudson, Keith Condie *(INL)*, S. Curtis Wilkins *(Consultant)*

Benchmarking the MELCOR Radiative Heat Transfer Model with FLUENT, Edward Artnak *(Univ of Texas, Austin)*, Steven Biegalski *(Univ of Texas)*, John Howell *(Univ of Texas, Austin)*, Randall Gauntt *(SNL)*, K. C. Wagner *(Dycoda)*

Using Coupled Computational Fluid Dynamics and Systems Analysis Tools to Evaluate Fluid Behavior in Advanced Reactor Systems, Richard R. Schultz *(INL)*

Analysis of the Applicability of the ANL NSTF Facility for the Simulation of the NGNP RCCS, Constantine P. Tzanos *(ANL)*

Simulation of Linear Slot Virtual Impactor Performance, Sridhar Hari, Yassin Hassan, Andrew McFarland *(Texas A&M)*

Computational Fluid Dynamics Simulation of a Cyclone, Shishan Hu, Andrew McFarland, Yassin A. Hassan *(Texas A&M)*

Communicating with Your Congressperson or Senator–Panel, sponsored by ETD. *Session Organizer:* Carol Berrigan *(NEI)* [Track 1]

PANELISTS:
- Ellie Shaw *(Exelon)*
- Amy Buu *(Westinghouse)*
- Mike Stewart *(Dominion)*
- Elizabeth McAndrew *(Constellation)*

Gas Reactor Fuels and Materials, sponsored by MSTD. [Track 6]

Gas Fast Reactor Fuel Development, Randall S. Fielding, Mitchell Meyer *(INL)*, Ramprashad Prabhakaran *(UNLV)*, James Henry Miller *(ORNL)*, Sean M. McDeavitt *(Purdue Univ)*

Property Versus Process Trends for Inner-Pyrocarbon Layers in TRISO-Coated Particle Fuel, John D. Hunn, Richard A. Lowden *(ORNL)*

Investigation of the Molecular Dynamics of Silicon Carbide at High Temperatures, Victor Hugo Gillette, Ayman I. Hawari *(NCSU)*, Abderrafi M. Ougouag *(INL)*

Fission Product Corrosion of Carbide and Nitride Materials, Paul A. Demkowicz, David A. Petti *(INL)*, Jason Kopp *(NCSU)*

Estimating Fracture Toughness in Heat Treated Ceramics Being Evaluated for Advanced Fuel Materials, Hannah Jo Yount, Todd R. Allen *(Univ of Wisconsin, Madison)*

Investigation of the Effect of Carbon Interstitials on Thermal Neutron Scattering in Graphite, Ayman I. Hawari *(NCSU)*

Development Capability for Commercial Advanced Gas Cooled Reactor (AGR) Fuels, Jason Pierce, Eugene Athon *(Nucl Fuel Svc)*

Lessons Learned from Near-Complete Decommissionings–Panel, sponsored by DDRD. *Session Organizer:* Joseph Carignan *(TLG Svc)* [Track 6]

PANELISTS:
- James J. Byrne *(GPU Nucl)*
- Einar Ronningen *(SMUD)*
- David Brevig *(SCE)*
- John Conant *(ABB Combustion Eng Nucl Power)*

2005 American Nuclear Society Young Professionals Congress

"Hitchhikers Guide to a Career in Nuclear"

Saturday, November 12, 2005 • 8:30 a.m. - 5:00 p.m. • Location: Congressional A & B

Workshop Organizer:
Co-organized by the ANS Young Members Group (ANS YMG) & the North American Young Generation in Nuclear (NA-YGN)

Workshop Outline:

8:00 A.M. – 8:30 A.M.	CONTINENTAL BREAKFAST
8:30 A.M. – 9:00 A.M.	WELCOME AND OPENING REMARKS David Pointer *(Chair, ANS Young Members Group)* Lisa Stiles-Shell *(President, North American Young Generation in Nuclear)*
9:00 A.M. – 10:00 A.M.	PULLING BACK THE CURTAIN: HOW DOES ANS WORK? Session Organizer: Sama Bilbao y Leon *(Treasurer, Young Members Group)* Session Facilitator: Ted Quinn *(Past President of ANS, 1998-1999)* Panelists: Jim Reinsch *(President, American Nuclear Society)* Donald Hoffman *(Representative of ANS Professional Divisions)* Larry Foulke *(Representative of ANS Committees)* Harry Bradley *(Executive Director, American Nuclear Society)*
10:00 A.M. -10:15 A.M.	BREAK
10:15 A.M. – 10:45 P.M.	HOW DO INTERNATIONAL YOUNG PROFESSIONALS STAY INVOLVED? Session Organizer: Lisa Stiles-Shell *(President, North American Young Generation in Nuclear)* Panelists: Martin Luthander *(Sweden)* Ilijana Ivekovic *(Croatia)* Stewart Lynas *(United Kingdom)*
10:45 A.M. –12:00 P.M.	HOT TOPIC: NUCLEAR'S ROLE IN THE "HYDROGEN ECONOMY" Session Organizer: Sama Bilbay y Leon *(Treasurer, ANS Young Members Group)* Panelists: Ken Schultz *(General Atomics)* Dave Henderson *(U.S. Department of Energy)*
12:00 P.M. – 1:00 P.M.	LUNCH (Speaker To Be Announced)
1:00 P.M. – 2:00 P.M.	HOW CAN I GET INVOLVED AND STAY INVOLVED? Session Organizer: Dena Belschner *(Vice Chair, ANS Young Members Group)* Panelists: Carol Berrigan *(Director of Industry Initiatives, Nuclear Energy Institute)* Sharon Kerrick *(Manager of Outreach and Volunteer Development, American Nuclear Society)*
2:00 P.M. -2:15 P.M.	BREAK
2:15 P.M. -3:15 P.M.	INTERACTIVE BREAKOUT SESSIONS Techniques of Time Management [Facilitator: TBA] Building Collaborative Relationships [Facilitator: Ryan Stone *(Duke Energy)*] Talking about Nuclear to Our Neighbors and Friends [Facilitator: Mimi Limbach *(Potomac Communications Group)*]
3:15 P.M. -3:45 P.M.	COFFEE BREAK
3:45 P.M. -4:45 P.M.	INTERACTIVE BREAKOUT SESSIONS Techniques of Time Management [Facilitator: TBA] Building Collaborative Relationships [Facilitator: Ryan Stone *(Duke Energy)*] Talking about Nuclear to Our Neighbors and Friends [Facilitator: Mimi Limbach *(Potomac Communications Group)*]
4:45 P.M. -5:00 P.M.	CLOSING REMARKS David Pointer *(Chair, ANS Young Members Group)*
7:00 P.M. -9:00 P.M.	ANS YOUNG PROFESSIONALS CONGRESS RECEPTION *(Sponsored by Westinghouse Electric Company, LLC)*

PROFESSIONAL DEVELOPMENT WORKSHOP #1:

"Introduction to New Analysis Capabilities of the ORIGEN Code"

Sunday, November 13, 2005 • 8:00 a.m. - 5:00 p.m. • Location: Palladian Ballroom

Workshop Organizer:
Stephen M. Bowman, SCALE Project Manager, Oak Ridge National Laboratory

Instructors:
Ian C. Gauld, ORIGEN Code Manager, Oak Ridge National Laboratory

Stephen M. Bowman, SCALE Project Manager, Oak Ridge National Laboratory

Purpose of Workshop:
The ORIGEN (Oak Ridge Isotope GENeration) series of nuclear isotopic depletion/decay codes are recognized as a standard throughout the world for spent fuel simulations and have been widely used in the nuclear industry for nearly 30 years. The latest version, ORIGEN-S, the only version of ORIGEN that is actively supported at Oak Ridge, is contained in the depletion analysis system called ORIGEN-ARP, which is part of the SCALE code system. ORIGEN-ARP creates problem- and time-dependent ORIGEN-S libraries by interpolating from pre-generated cross-section libraries generated using SCALE 1-D and 2-D burnup sequences. The advantage of this new ORIGEN-ARP system is that it runs in a small fraction of the time required by conventional methods, preserves full accuracy, and has been implemented on a PC with a graphical user interface (GUI), a post-processing utility, and a plotting code. ORIGEN-ARP is available as part of the SCALE code package or as a stand-alone code package.

This one-day workshop will include presentations on the capabilities of the ORIGEN-S code, and cover nuclear data improvements, new analysis capabilities, and validation studies to support its application to a wide range of current and advanced nuclear applications. The target audience is new users, users who desire more extensive knowledge of code applications, and users of ORIGEN2 who would like to upgrade to the currently supported version. The presentations will cover: new libraries for commercial reactor fuel designs (MOX & LEU), cross-section interpolation methods, upgraded cross section data, new neutron source spectra methods adopted from the SOURCES code, new gamma ray library, addition of ENDF/B-VI fission yields for 30 fissioning actinides, options to support use of the ANS decay heat standard, and extensive and ongoing validation studies. Methods that allow users to generate their own ORIGEN-ARP libraries using the 1-D and 2-D burnup sequence models in SCALE will also be demonstrated.

About half the workshop will involve presentation and demonstrations, and the other half hands-on problem sessions. Attendees are strongly encouraged to bring a laptop PC with Windows XP or 2000.

Note: The workshop is limited to 30 attendees.

Workshop Outline:

TIME	TOPIC
8:00 a.m. – 8:30 a.m.	Introduction to ORIGEN-S analysis capabilities
8:30 a.m. – 9:00 a.m.	Summary of new nuclear data libraries and validation studies
9:00 a.m. – 10:00 a.m.	Overview of ORIGEN-ARP and the Windows user interface
10:00 a.m. – 10:30 a.m.	Break and code installation on participant PCs
10:30 a.m. – 11:00 a.m.	New fuel assembly cross section libraries in SCALE
11:00 a.m. – 11:50 a.m.	Developing ORIGEN libraries using SCALE 1-D and 2-D assembly models
11:50 a.m. – 1:00 p.m.	Lunch
1:00 p.m. – 2:00 p.m.	Demonstration using ORIGEN-ARP and data plotting package (hands-on)
2:00 p.m. – 5:00 p.m.	ORIGEN-ARP problem session (hands-on)

DOE Nuclear Criticality Safety Program and "Endusers Initiatives Workshop"

Friday, November 18, 2005 • 8:00 a.m. - 4:30 p.m. • Location: Diplomat Ballroom

Sponsored by the Nuclear Criticality Safety Division
Supported by the Nuclear Criticality Safety Program (NCSP)

Purpose:
The NCSP is a comprehensive, crosscutting program that integrates the need to maintain the US criticality safety infrastructure with effective support for criticality safety programs throughout the DOE complex. This workshop, while not part of the official ANS program, has been arranged through the courtesy of the ANS Headquarters staff. The presentations are based on the DOE NCS Program, but because of the global application of the work supported by the DOE NCSP, feedback is encouraged from anyone interested in the needs of a diverse, well-organized criticality safety program in support of operations. Extensive audience participation is encouraged and anticipated.

Scope:
For this workshop, NCSP solicits input concerning ways to improve the ability of criticality safety practitioners to utilize NCSP products and thus better provide criticality safety support at their sites. NCSP seeks answers to the questions: Are the current NCSP products useful? What impediments, if any, limit their usefulness? What additional products would be useful?

At this workshop, the Enduser group will present initiatives and establish working groups for the criticality safety community to address these questions, identify needs, and propose actions to enhance criticality safety programs across the DOE complex.

Initial presentations will be followed by formation of working groups and group participation. Interested criticality safety practitioners are welcome to participate.

Program:
1) Enduser Group status and proposed initiatives effort

2) Introduction of proposed initiatives

3) Working group break-outs

4) Summary of working group progress

Contacts:
Dr. Jerry N. McKamy (Email: Jerry.McKamy@nnsa.doe.gov)

Dr. John S. Pearson (Email: pearson3@llnl.gov)

NOTE: some afternoon committee meetings will be held in rooms that follow a technical session. The technical sessions must be allowed to finish prior to entering the room to begin the committee meeting.

NATIONAL COMMITTEES

Accreditation Policies & Procedures
SUNDAY, 5:00 P.M. - 7:00 P.M.
LOCATION: Parlor # 330

Board of Directors/ Professional Division Reports
WEDNESDAY, 4:00 P.M. - 6:00 P.M.
LOCATION: Regency Ballroom

Board of Directors
THURSDAY, 8:00 A.M. - 5:00 P.M.
LOCATION: Regency Ballroom

Book Publishing
SUNDAY, 11:00 A.M. - 12:00 P.M.
LOCATION: Congressional A

Bylaws & Rules
SUNDAY, 1:30 P.M. - 4:00 P.M.
LOCATION: Forum Room

Executive Conference Review
SUNDAY, 10:30 A.M. - 12:00 P.M.
LOCATION: Capitol Room

Finance
TUESDAY, 4:00 P.M. - 7:00 P.M.
LOCATION: Chairman's Boardroom

Honors & Awards
MONDAY, 4:00 P.M. - 7:00 P.M.
LOCATION: Parlor #373

International
SUNDAY, 3:00 P.M. - 6:00 P.M.
LOCATION: Diplomat Ballroom

Local Sections/Workshop
SUNDAY, 8:00 A.M. - 12:00 P.M.
LOCATION: Governor's Boardroom

Meetings, Proceedings, & Transactions
MONDAY, 7:30 A.M. - 8:30 A.M.
LOCATION: Parlor #273

Membership
SUNDAY, 11:00 A.M. - 1:00 P.M.
LOCATION: Parlor #373

National Program Committee (NPC) – Program
WEDNESDAY, 4:00 P.M. - 7:00 P.M.
LOCATION: Palladian Ballroom

National Program Committee (NPC) – Screening & International
MONDAY, 4:00 P.M. - 7:00 P.M.
LOCATION: Diplomat Ballroom

NEED
SUNDAY, 7:30 P.M. - 9:00 P.M.
LOCATION: Parlor #252

***NS&E* Editorial Advisory Board**
SUNDAY, 9:00 A.M. - 10:00 A.M.
LOCATION: Congressional A

***NT* Editorial Advisory Board**
SUNDAY, 10:00 A.M. - 11:00 A.M.
LOCATION: Congressional A

***Nuclear News* Editorial Advisory**
SUNDAY, 4:00 P.M. - 5:30 P.M.
LOCATION: Council Room

Planning
SUNDAY, 2:00 P.M. - 6:00 P.M.
LOCATION: Parlor #262

Policies & Procedures/ Quality Improvement (PPQI)
SUNDAY, 2:00 P.M. - 4:00 P.M.
LOCATION: Parlor #230

President's Meeting with Committee Chairs
SUNDAY, 9:00 A.M. - 10:30 A.M.
LOCATION: Diplomat Ballroom

President's Meeting with Division Chairs
SUNDAY, 10:30 A.M. - 12:00 P.M.
LOCATION: Diplomat Ballroom

Professional Development Workshop
TUESDAY, 7:30 A.M. - 8:30 A.M.
LOCATION: Parlor #273

Professional Divisions
TUESDAY, 4:00 P.M. - 7:00 P.M.
LOCATION: Empire Ballroom

Professional Engineering Exam
SUNDAY, 3:00 P.M. - 6:00 P.M.
LOCATION: Embassy Room

Professional Women in ANS
MONDAY, 11:30 A.M. - 1:00 P.M.
LOCATION: Parlor #273

Public Information
SUNDAY, 3:30 P.M. - 5:30 P.M.
LOCATION: Calvert Room

Public Policy
WEDNESDAY, 11:30 A.M. - 1:00 P.M.
LOCATION: Parlor #273

Publications Steering
MONDAY, 4:00 P.M. - 6:00 P.M.
LOCATION: Parlor #273

Scholarship Policy & Coordination
SUNDAY, 10:30 A.M. - 12:00 P.M.
LOCATION: Forum Room

Student Sections
SUNDAY, 12:00 P.M. - 2:00 P.M.
LOCATION: Parlor #262

Technical Journals
SUNDAY, 1:00 P.M. - 3:30 P.M.
LOCATION: Governor's Boardroom

SPECIAL COMMITTEES

Development
WEDNESDAY, 9:00 A.M. - 10:30 A.M.
LOCATION: Parlor #252

Nuclear Nonproliferation
SUNDAY, 2:00 P.M. - 4:00 P.M.
LOCATION: Governor's Boardroom

Power Generation Outreach
SUNDAY, 11:30 A.M. - 1:00 P.M.
LOCATION: Council Room

OTHER COMMITTEES

CNF
MONDAY, 7:30 P.M. - 10:00 P.M.
LOCATION: Parlor #273

Eagle Alliance Board of Directors
SUNDAY, 1:00 P.M. - 3:30 P.M.
LOCATION: Chairman's Boardroom

Faculty Advisors Roundtable
MONDAY, 7:30 A.M. - 8:30 A.M.
LOCATION: Parlor #362

ICAPP 2006 Planning Committee
TUESDAY, 5:00 P.M. - 7:00 P.M.
LOCATION: Parlor #273

Mathematics & Computation/Reactor Physics/Radiation Protection & Shielding Joint Benchmark Meeting
SUNDAY, 11:00 A.M. - 1:00 P.M.
LOCATION: Parlor #273

NEDHO
MONDAY, 4:30 P.M. - 6:00 P.M.
LOCATION: Council Room

Past President's Advisory
TUESDAY, 7:00 A.M. - 9:00 A.M.
LOCATION: Parlor #262

PHYSOR - 2006 Planning Committee
TUESDAY, 4:00 P.M. - 6:00 P.M.
LOCATION: Parlor #362

UWC 2006 Planning Committee
SUNDAY, 10:00 A.M. - 11:30 A.M.
LOCATION: Council Room

YMG Executive Committee
SUNDAY, 7:00 A.M. - 8:30 A.M.
LOCATION: Forum Room

DIVISION COMMITTEES

Accelerator Applications

EXECUTIVE
MONDAY, 11:30 A.M. - 1:30 P.M.
LOCATION: Parlor #230

PROGRAM/MEMBERSHIP
SUNDAY, 7:30 P.M. - 9:30 P.M.
LOCATION: Parlor #262

Aerospace Nuclear Science and Technologies

COMMITTEE MEETING
SUNDAY, 10:00 A.M. - 12:00 P.M.
LOCATION: Parlor #262

Biology & Medicine

COMMITTEE OF THE WHOLE
SUNDAY, 4:00 P.M. - 5:30 P.M.
LOCATION: Parlor #273

COMPUTATIONAL MEDICAL PHYSICS WORKING GROUP
SUNDAY, 4:15 P.M. - 5:45 P.M.
LOCATION: Forum Room

Decommissioning, Decontamination & Reutilization

COMMITTEE MEETING
SUNDAY, 1:00 P.M. - 5:30 P.M.
LOCATION: Senate Room

Committee Meetings

Education & Training

ALPHA NU SIGMA
SUNDAY, 1:00 P.M. - 2:00 P.M.
LOCATION: Embassy Room

NUCLEAR WORKFORCE WORKING GROUP
SUNDAY, 12:00 P.M. - 1:00 P.M.
LOCATION: Parlor #230

EXECUTIVE/MEMBERSHIP/ HONORS & AWARDS
SUNDAY, 1:30 P.M. - 4:00 P.M.
LOCATION: Parlor #273

PROGRAM
SUNDAY, 10:30 A.M. - 12:00 P.M.
LOCATION: Parlor #230

UNIVERSITY/INDUSTRY RELATIONS
SUNDAY, 9:30 A.M. - 10:30 A.M.
LOCATION: Parlor #230

Environmental Sciences

EXECUTIVE
SUNDAY, 10:00 A.M. - 2:30 P.M.
LOCATION: Parlor # 330

PROGRAM
SUNDAY, 8:30 A.M. - 10:00 A.M.
LOCATION: Parlor # 330

Fusion Energy

EXECUTIVE
SUNDAY, 3:00 P.M. - 5:00 P.M.
LOCATION: Congressional B

Fuel Cycle & Waste Management

EXECUTIVE
SUNDAY, 3:30 P.M. - 5:30 P.M.
LOCATION: Cabinet Room

PROGRAM
SUNDAY, 1:30 P.M. - 3:30 P.M.
LOCATION: Cabinet Room

TECHNICAL OPERATING COMMITTEE
SUNDAY, 12:00 P.M. - 1:30 P.M.
LOCATION: Cabinet Room

Human Factors

EXECUTIVE/PROGRAM
MONDAY, 4:00 P.M. - 6:30 P.M.
LOCATION: Parlor #362

Isotopes & Radiation

EXECUTIVE
SUNDAY, 2:30 P.M. - 4:00 P.M.
LOCATION: Parlor #330

JOINT PROGRAM COMMITTEE - I&R & B&M
SUNDAY, 1:30 P.M. - 2:30 P.M.
LOCATION: Capitol Room

Materials Science & Technology

EXECUTIVE
MONDAY, 7:00 P.M. - 9:00 P.M.
LOCATION: Parlor #362

Mathematics & Computation

EXECUTIVE
SUNDAY, 2:00 P.M. - 4:00 P.M.
LOCATION: Council Room

PROGRAM
SUNDAY, 1:00 P.M. - 2:00 P.M.
LOCATION: Council Room

Nuclear Criticality Safety

EDUCATION MEETING
SUNDAY, 10:00 A.M. - 11:00 A.M.
LOCATION: Parlor #273

EXECUTIVE
SUNDAY, 3:00 P.M. - 5:30 P.M.
LOCATION: Parlor #373

PROGRAM
SUNDAY, 1:00 P.M. - 3:00 P.M.
Location: Parlor #373

Nuclear Installation Safety

EXECUTIVE
MONDAY, 5:00 P.M. - 8:00 P.M.
LOCATION: Parlor #262

PROGRAM
SUNDAY, 7:30 P.M. - 11:00 P.M.
LOCATION: Parlor #373

Operations & Power

EXECUTIVE
SUNDAY, 3:30 P.M. - 6:00 P.M.
LOCATION: Hampton Ballroom

NUCLEAR CONSTRUCTION WORKING GROUP
TUESDAY, 4:00 P.M. - 6:00 P.M.
LOCATION: Parlor #373

PROGRAM
SUNDAY, 1:00 P.M. - 3:00 P.M.
LOCATION: Hampton Ballroom

Radiation Protection & Shielding

EXECUTIVE
MONDAY, 5:00 P.M. - 7:00 P.M.
LOCATION: Parlor #230

PROGRAM
MONDAY, 4:00 P.M. - 5:00 P.M.
LOCATION: Parlor #230

Reactor Physics

EXECUTIVE
SUNDAY, 4:00 P.M. - 6:00 P.M.
LOCATION: Parlor #252

GOALS & PLANNING
SUNDAY, 12:00 P.M. - 2:00 P.M.
LOCATION: Parlor #252

PROGRAM
SUNDAY, 2:00 P.M. - 4:00 P.M.
LOCATION: Parlor #252

Robotics & Remote Systems

EXECUTIVE
SUNDAY, 10:00 A.M. - 3:00 P.M.
LOCATION: Parlor #362

Thermal Hydraulics

EXECUTIVE
SUNDAY, 5:00 P.M. - 7:00 P.M.
LOCATION: Parlor #362

HONORS & AWARDS
TUESDAY, 5:00 P.M. - 7:00 P.M.
LOCATION: Parlor #230

PROGRAM
SUNDAY, 3:00 P.M. - 5:00 P.M.
LOCATION: Parlor #362

STANDARDS COMMITTEES

ANS Standards Board

TUESDAY, 9:00 A.M. - 5:00 P.M.
LOCATION: Council Room

ANS-2.15, 2.16, 2.21 & 3.8.10 Working Groups

TUESDAY, 1:00 P.M. - 3:30 P.M.
LOCATION: Parlor #230

ANS-6.1.1 Working Group

MONDAY, 8:00 A.M. - 10:00 A.M.
LOCATION: Parlor #252

ANS-8.1 Working Group

TUESDAY, 7:00 A.M. - 8:30 A.M.
LOCATION: Parlor #373

ANS-8.21 Working Group

TUESDAY, 7:00 A.M. - 8:30 A.M.
LOCATION: Parlor #362

THURSDAY, 7:00 A.M. - 8:30 A.M.
LOCATION: Parlor #362

ANS-8.23 Working Group

SATURDAY, 8:00 A.M. - 6:00 P.M.
LOCATION: Senate Room

ANS-8.26 Working Group

WEDNESDAY, 7:00 A.M. - 8:30 A.M.
LOCATION: Parlor #273

ANS-19

MONDAY, 8:30 A.M. - 10:30 A.M.
LOCATION: Parlor #373

ANS-19.6.1 Working Group

THURSDAY, 8:30 A.M. - 5:00 P.M.
LOCATION: Parlor #262

ANS-19.9

SUNDAY, 1:00 P.M. - 3:00 P.M.
LOCATION: Congressional B

ANS-28

WEDNESDAY, 8:30 A.M. - 5:00 P.M.
LOCATION: Parlor #330

THURSDAY, 8:30 A.M. - 12:00 P.M.
LOCATION: Parlor #330

ANS-51.1/52.1

TUESDAY, 8:00 A.M. - 5:00 P.M.
LOCATION: Senate Room

ANS-58.2 Working Group

TUESDAY, 8:00 A.M. - 5:00 P.M.
LOCATION: Parlor #252

Emergency Planning Standards Ad-Hoc Review Meeting

SUNDAY, 4:00 P.M. - 6:00 P.M.
LOCATION: Chairman's Boardroom

Level 3 PRA

TUESDAY, 1:00 P.M. - 5:00 P.M.
LOCATION: Parlor #273

NFSC

MONDAY, 8:30 A.M. - 5:00 P.M.
LOCATION: Edison Electric Institute

NTAG

WEDNESDAY, 8:00 A.M. - 12:00 P.M.
LOCATION: Parlor #262

RISC

MONDAY, 9:00 A.M. - 5:00 P.M.
LOCATION: Aerospace Center

ANS NUCLEAR TECHNOLOGY EXPO

Sunday, November 13
6:00 p.m. - 7:30 p.m.
(ANS President's Reception)

Monday, November 14
11:30 a.m. - 6 p.m.
(Luncheon • Caricaturist • Prizes • Welcome Reception)

Tuesday, November 15
10:00 a.m. - 2:00 p.m.
(Concession Lunch • Caricaturist • Prizes)

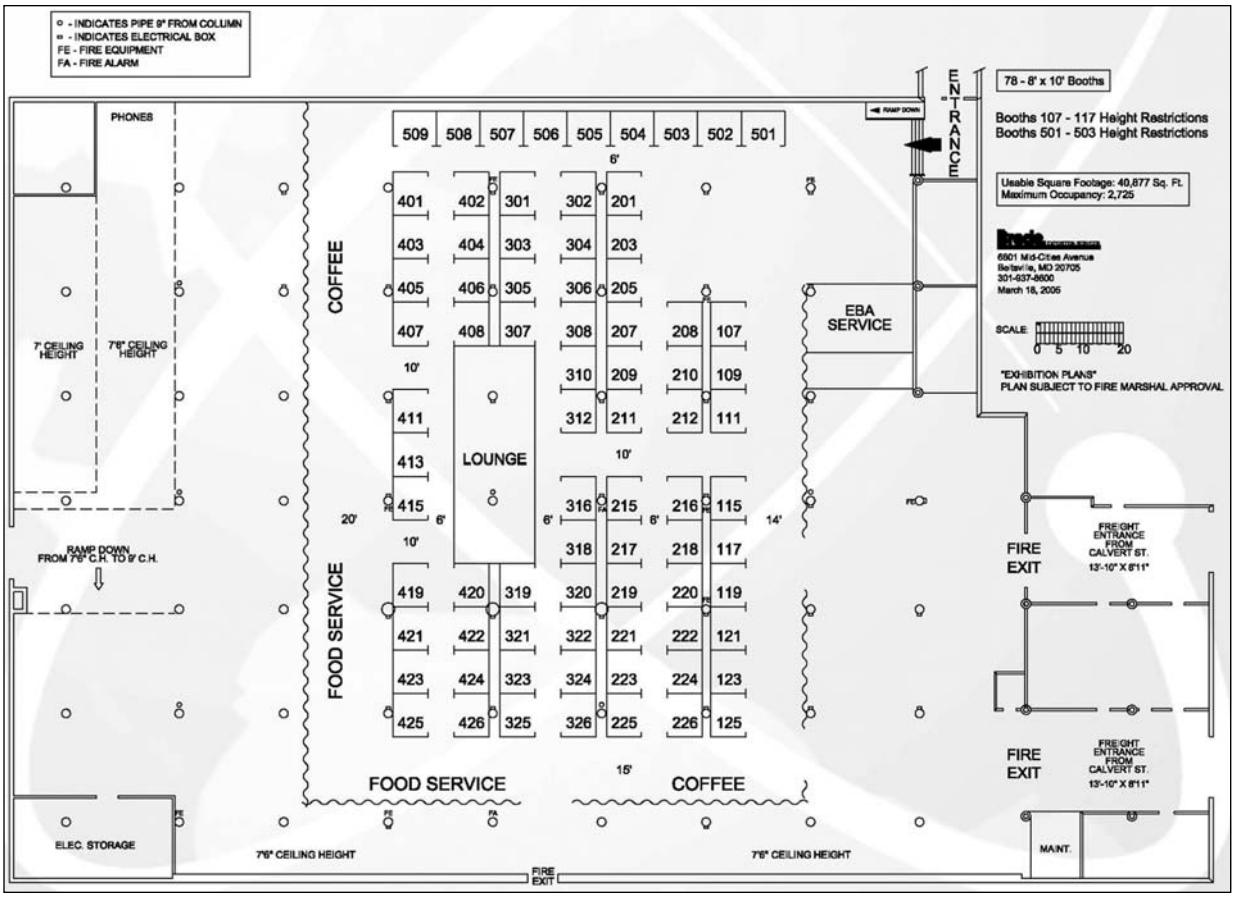
The ANS Nuclear Technology Expo will be held November 13-15 in the Lower Level Exhibit Hall of the Omni Shoreham Hotel.

The Expo will open Sunday from 6:00 p.m. - 7:30 p.m. for the ANS President's Reception. Many other special events will take place in the Hall on Monday and Tuesday. (Some events require tickets.)

Representatives from leading organizations will be available to answer your questions about their innovative products and services. A list of exhibitors follows.

Floor Plan

Lower Level Exhibit Hall – Omni Shoreham Hotel



We thank the following companies for their generous support of the ANS Expo Special Events:

AECL Technologies
(Welcome Reception)

Bechtel Power
(Attendee Prizes)

BWX Technologies
(Welcome Reception)

EXCEL Services Corporation
(Grand Prizes)

GE Nuclear Energy
(Welcome Reception)

Jet Propulsion Laboratory
(Tuesday Mid-Morning Break and Welcome Reception)

Mitsubishi Heavy Industries, Ltd.
(Welcome Reception)

Private Fuel Storage LLC
(Caricature Artist)

Invest in Your Future

ANS Mentoring Program
Sunday, Nov 13, 2005
5:00 - 6:00 pm
Parlor #230

The Mentoring Program is a unique opportunity for Mentors to invest in the future by connecting with the next shooting stars (new members, first-time meeting attendees, and student members) of the nuclear industry. It's a chance for those new to the profession to connect with "those in the know;" experienced professionals with real-world knowledge to share.

What are the benefits for Mentors and Protégés?

Mentors
· Influence the future
· Keep up to date
· Leave a legacy

Protégés
· Fast track a career
· Get individual attention
· Build a professional relationship

If you are the next shooting star of the nuclear industry or you wish to catch a shooting star, sign up today to participate in the ANS Mentoring Program. You'll be given information to guide you and support from previous program participants. Of course, you'll be connected with someone whose interests match your own with the potential for lifelong learning and friendship.

Yes. I want to be a: _____Mentor _____Protégé

(Please print all information)

Name

Company or School

Address City / State / Zip

Phone Fax Email

Professional Interests:

Please list the Divisions and Committees of which you are, or would like to be, a member:

Please mail, fax, or email this form by November 4, 2005 to:

Membership Department
American Nuclear Society
555 N. Kensington Avenue
La Grange Park, IL 60526
Phone: 800-323-3044 Fax: 708-579-8295 Email: sbraland@ans.org

ADVANCE REGISTRATION FORM

2005 ANS WINTER MEETING:
"Talk About Nuclear Differently: A Good Story Untold"

November 13-17, 2005 • Washington, DC • Omni Shoreham Hotel

FILL OUT COMPLETELY - PLEASE PRINT

ANS ID #: _____

First Name/Middle Initial: _____ Last Name: _____

Job Title: _____ Company/Affiliation: _____

Street Address: _____ ❒ Company or ❒ Home

City/State/Zip Code: _____ Country: _____

Telephone: _____ Facsimile: _____

Email: _____

ANS Members, Please Check If This Is Your: ❒ New Address *(will change member record)* or ❒ Meeting Registration Address Only

Please Indicate: ❒ ANS National Individual Member ❒ ANS Fellow ❒ Emeritus Member ❒ Student
❒ Non-member ❒ Non-member Invited Speaker ❒ Organization Member Representative
❒ Special accommodation required to fully participate (40) ❒ Exhibitor
❒ ANS Local Section Member *(ANS Local Section Members who are not national members, do not qualify for ANS Member rate.)*

INDIVIDUAL CONFERENCE REGISTRATION – PREREGISTRATION DEADLINE FOR REDUCED FEE IS OCTOBER 21, 2005

	Fees Paid By October 21, 2005		Fees Paid After October 21, 2005	
	ANS National Member	Non-Member	ANS National Member	Non-Member
Full ANS Meeting	[01] ❒ $615	[02] ❒ $765*	[09] ❒ $715	[10] ❒ $865*
Includes 1 ticket to the ANS President's Reception & Attendee Luncheon in the Expo				
One Day Attendance	[03] ❒ $475	[04] ❒ $625	[11] ❒ $550	[12] ❒ $700
Circle One: Mon Tues Wed Thur does not include ticket to the ANS President's Reception or other events				
Student	[05] ❒ $85	[06] ❒ $135	[13] ❒ $135	[14] ❒ $185
does not include ticket to the ANS President's Reception or other events				
ANS Emeritus Member	[07] ❒ $85	N/A	[15] ❒ $135	N/A
does not include ticket to the ANS President's Reception or other events				
Spouse/Guest	[08] ❒ $120	N/A	[16] ❒ $165	N/A

(Includes 1 ticket to the ANS President's Reception and admittance to the spouse/guest hospitality breakfast on Monday, Tuesday, & Wednesday - does not include technical sessions or other events.)

Please supply spouse/guest name: _____

Please register on-site after Wednesday, November 9, 2005.

2005 ANS YOUNG PROFESSIONALS CONGRESS – "HITCHHIKERS GUIDE TO A CAREER IN NUCLEAR"

The 2005 ANS Young Professionals Congress will be held on Saturday, November 12, 2005. Registration fees, which include continental breakfast, lunch and afternoon coffee break, are (please check the box of which option you will be choosing):

- ANS member, registered for ANS national meeting [60] ❒ $75
- ANS member, not registered for ANS national meeting [61] ❒ $250
- non-ANS member [62] ❒ $300

***ATTENTION NON-MEMBER REGISTRANTS:**

The full ANS meeting non-member fee entitles you to a one-time free membership in the American Nuclear Society (date of processed application through Dec 2006). You must first fill out a membership application. After your application is processed, you will be sent a membership card and *Nuclear News* magazine, beginning your benefits. Non-U.S. residents will need to pay $56 for *Nuclear News* postage. This offer does not apply to those registered for workshops only. Free membership available to non-member full ANS meeting registrants only (cannot be used for membership renewal).

[75] ❒ I want to be a member of ANS. My membership benefits will be in effect from date of processed application through December, 2006.
[76] ❒ I do not want to be a member of ANS.

CONTINUED ON THE NEXT PAGE. PLEASE RETURN BOTH PAGES WITH PAYMENT.

NAME: _____

SPECIAL EVENTS AND TOURS

PLEASE NOTE: YOU MUST BE REGISTERED FOR THE MEETING TO ATTEND EVENING EVENTS.

SUNDAY, NOVEMBER 13, 2005

ADDITIONAL TICKETS: ANS PRESIDENT'S RECEPTION — [21] # OF TICKETS ___ @ $65 EACH = $_____

MONDAY, NOVEMBER 14, 2005

ADDITIONAL TICKETS: ATTENDEE LUNCHEON IN THE NUCLEAR TECHNOLOGY EXPO — [22] # OF TICKETS ___ @ $45 EACH = $_____

SPOUSE/GUEST TOUR: "INTERNATIONAL SPY MUSEUM" — [23] # OF TICKETS ___ @ $40 EACH = $_____

EVENING EVENT: RECEPTION AT THE NATIONAL AIR AND SPACE MUSEUM — [24] # OF TICKETS ___ @ $55 EACH = $_____

TUESDAY, NOVEMBER 15, 2005

LUNCHEON: HONORS AND AWARDS LUNCHEON — [25] # OF TICKETS ___ @ $45 EACH = $_____

SPOUSE/GUEST TOUR: "THE PRESIDENTS, EMBASSY ROW, AND LESSONS IN DIPLOMACY" — [26] # OF TICKETS ___ @ $40 EACH = $_____

WEDNESDAY, NOVEMBER 16, 2005

LUNCHEON: MATERIALS SCIENCE AND TECHNOLOGY DIVISION (MSTD) LUNCHEON — [27] # OF TICKETS ___ @ $45 EACH = $_____

EVENING EVENT: RECEPTION AND DINNER AT THE RONALD REAGAN BUILDING AND INTERNATIONAL TRADE CENTER — [28] # OF TICKETS ___ @ $50 EACH = $_____

MEETING PUBLICATIONS

ALL REGISTERED MEETING ATTENDEES WILL RECEIVE A CD-ROM OF THE ANS WINTER MEETING SUMMARIES.

ADDITIONAL PUBLICATIONS AVAILABLE FOR PURCHASE:

[41] ❒ I WANT TO PURCHASE AN ADDITIONAL COPY OF THE ANS TRANSACTIONS (WINTER MEETING SUMMARIES) ON CD-ROM FOR $75 $_____

[42] ❒ I WANT TO PURCHASE A PRINTED COPY OF THE ANS TRANSACTIONS (WINTER MEETING SUMMARIES) FOR $30 $_____

ANS PROFESSIONAL DEVELOPMENT WORKSHOPS (PDW)

REGISTRATION FOR THE ANS PROFESSIONAL DEVELOPMENT WORKSHOP(S) IS SEPARATE FROM, AND IN ADDITION TO, THE 2005 ANS WINTER MEETING. IF ATTENDING BOTH, A WORKSHOP(S) AND THE WINTER MEETING, YOU MUST REGISTER AND PAY FOR THEM BOTH. REGISTRATION FOR THE WORKSHOP(S) INCLUDES COPIES OF AVAILABLE PAPERS AND MATERIALS. PLEASE REGISTER EARLY, SPACE IS LIMITED!

PDW #1: "INTRODUCTION TO NEW ANALYSIS CAPABILITIES OF THE ORIGEN CODE " - SUNDAY, NOVEMBER 13, 2005

ANS NAT'L MEMBER [50] ❒ @ $450 — NON-MEMBER [51] ❒ @ $550 $_____

~~PDW #2: "PROJECT MANAGEMENT IN NUCLEAR UTILITIES" - SUNDAY, NOVEMBER 13, 2005~~ CANCELED!

~~ANS NAT'L MEMBER [52] ❒ @ $450 — NON-MEMBER [53] ❒ @ $550 $_____~~

~~PDW #3: "DEVELOPMENT AND APPLICATION OF CONSENSUS STANDARDS" - THURSDAY, NOVEMBER 17, 2005~~ CANCELED!

~~ANS NAT'L MEMBER [54] ❒ @ $450 — NON-MEMBER [55] ❒ @ $550 $_____~~

GRAND TOTAL AND FORM OF PAYMENT FOR MEETINGS, TOURS AND WORKSHOPS

TOTAL OF ALL FUNCTIONS AND EVENTS **GRAND TOTAL** $_____

METHOD OF PAYMENT

❒ CHECK ❒ AMERICAN EXPRESS ❒ VISA ❒ MASTERCARD ❒ DINERS CLUB ❒ WIRE TRANSFER

CREDIT CARD NUMBER: _____ EXP. DATE: _____

CARDHOLDER'S SIGNATURE: _____

PRINT CARDHOLDER'S NAME IF DIFFERENT THAN REGISTRANT

PLEASE REGISTER ON-SITE AFTER WEDNESDAY, NOVEMBER 9, 2005.

MAKE CHECKS PAYABLE TO ANS IN U.S. FUNDS AND MAIL TO ANS, 97781 EAGLE WAY, CHICAGO, IL 60678-9770. CREDIT CARD REGISTRATIONS MAY BE FAXED TO 708/579-8314. DO NOT MAIL REGISTRATIONS WHICH HAVE BEEN FAXED. BANK FUNDS TRANSFER INFORMATION AVAILABLE FROM ANS REGISTRAR. REGISTRATION CANCELLATIONS MUST BE MADE IN WRITING PRIOR TO OCTOBER 21ST IN ORDER TO RECEIVE A REFUND MINUS A $75 PROCESSING FEE. SPECIAL EVENT AND TOUR TICKETS WILL BE REFUNDED IN FULL IF CANCELLATION REQUEST IS RECEIVED BY OCTOBER 21ST. MEETING REGISTRATIONS, SPECIAL EVENT AND TOUR TICKETS CANCELED AFTER OCTOBER 21ST WILL NOT BE REFUNDED; HOWEVER,YOU MAY SEND A SUBSTITUTE. PLEASE CONTACT THE ANS REGISTRAR AT TELEPHONE NUMBER: 708/579-8316 OR EMAIL: registrar@ans.org WITH ANY QUESTIONS.

ANS 2005 WINTER MEETING
November 13-17, 2005

RESERVATION DEADLINE: OCTOBER 12, 2005

HOTEL TELEPHONE - MAIN LINE: 202-234-0700
RESERVATIONS TELEPHONE: 800-843-6664
RESERVATIONS FAX: 202-756-5145

FOR RESERVATIONS, EITHER CALL OR SEND THIS FORM DIRECTLY TO THE HOTEL – DO NOT SEND THIS FORM TO THE AMERICAN NUCLEAR SOCIETY

PLEASE PRINT OR TYPE (* REQUIRED)

GUEST NAME(S): _____

COMPANY: _____

MAILING ADDRESS: _____

CITY/STATE/ZIP: _____ COUNTRY: _____

TELEPHONE: _____ FACSIMILE: _____

ARRIVAL DATE: _____ DEPARTURE DATE: _____

PREFERRED ACCOMMODATIONS

SPECIAL REQUEST: ❒ SMOKING ❒ NON-SMOKING ❒ HANDICAP ACCESSIBLE

BED REQUEST: ❒ TWO DOUBLE BEDS ❒ ONE KING BED

ROOM RATE*: ❒ $204.00 *(SINGLE OR DOUBLE OCCUPANCY)*

* THERE IS A $30 CHARGE FOR EACH ADDITIONAL PERSON.

ADDITIONAL SPECIAL REQUESTS: _____

EXPECTED ARRIVAL TIME: _____

CHECK-IN TIME IS 3:00 P.M. • CHECK-OUT TIME IS 12:00 P.M.

METHOD OF PAYMENT

CHECK # _____

CREDIT CARD

❒ AMERICAN EXPRESS ❒ VISA ❒ MASTER CARD ❒ DINERS CLUB ❒ CARTE BLANCHE ❒ DISCOVER

CREDIT CARD NUMBER: _____ EXPIRATION DATE: _____

CARDHOLDER'S NAME: _____ DEPOSIT AMOUNT: _____

CARDHOLDER'S SIGNATURE: _____

PLEASE NOTE: RESERVE YOUR ROOM EARLY! RESERVATIONS MUST BE MADE BY OCTOBER 12, 2005.

- RESERVATIONS RECEIVED AFTER THE DEADLINE DATE WILL BE SUBJECT TO AVAILABILITY AND WILL BE CHARGED AT THE HOTEL'S PREVAILING ROOM RATE.
- THE HOTEL'S CHECK-IN TIME IS 3:00 P.M. ROOM ASSIGNMENTS PRIOR TO THAT TIME ARE ON A "SPACE AVAILABILITY" BASIS ONLY.
- THE HOTEL'S CHECK-OUT TIME IS 12:00 P.M. GROUP ATTENDEES STAYING IN THEIR ROOMS BEYOND CHECK-OUT TIME WITHOUT HOTEL AUTHORIZATION WILL BE CHARGED FOR AN ADDITIONAL ROOM NIGHT. LATE CHECK-OUT IS PROVIDED BASED ON AVAILABILITY AND IS SUBJECT TO THE HOTEL'S BUSINESS NEEDS. ARRANGEMENTS CAN BE MADE BY CONTACTING THE FRONT DESK AND REQUESTING LATE CHECK-OUT.
- ONE NIGHT'S DEPOSIT OR CREDIT CARD INFORMATION MUST ACCOMPANY RESERVATION TO GUARANTEE ROOM.
- YOUR DEPOSIT GUARANTEES YOUR ROOM. PLEASE TELEPHONE CHANGES TO OUR RESERVATION DEPARTMENT AT 800-843-6664. FAILURE TO CANCEL YOUR RESERVATION 72 HOURS PRIOR TO YOUR ARRIVAL DAY WILL RESULT IN ONE NIGHT'S ROOM AND TAX BEING CHARGED TO YOUR CREDIT CARD OR LOSS OF DEPOSIT.
- IN THE EVENTS OF SHARE-WITHS OR ROOMMATES, PLEASE SEND ONLY ONE FORM.
- ALL RATES ARE SUBJECT TO APPLICABLE TAXES, SUBJECT TO CHANGE WITHOUT NOTICE. (CURRENT OCCUPANCY TAX IS 14.5%)