

## Register now for the 2019 ANS Annual Meeting in Minneapolis

**J**oin your fellow ANS members at the Annual Meeting for hot-topic technical sessions and popular plenary speakers. The theme of the June 9–13 meeting is “The Value of Nuclear,” and it is being held in downtown Minneapolis, Minn., at the Hyatt Regency Minneapolis.

The general chair is Timothy O’Connor, chief nuclear officer of Xcel Energy, which is based in Minneapolis. Assistant general chairs, also from Xcel Energy, are Patrick Burke, Renee Eickstadt, Peter Gardner, Pam Gorman, and Michelle Kelly. The program chair is Sue Aggarwal, of New Millennium Nuclear Technologies International, and the assistant program chair is James Byrne, of Byrne & Associates.

Participants representing every field of nuclear science and technology are expected to attend. Highly anticipated events include the President’s Reception on the evening of June 9, the opening plenary session on the morning of June 10, and the President’s Special Session, “Popping the Nuclear Bubble—A Facilitated Conversation with Minnesota’s Utility Community,” which will take place on June 11.

Attendees can sign up to tour one of



*Minneapolis is the site of the 2019 ANS Annual Meeting. (Photo: ©Krivit Photography/Meet Minneapolis)*

Xcel Energy’s two Minnesota nuclear facilities: Monticello, a 671-MWe boiling water reactor, or Prairie Island, which hosts two 550-MWe pressurized water reactors. Each tour will include the respective site’s training center, including a simulator demonstration; nonradiological controlled areas; and dry cask storage facility. Those who tour Prairie Island will also visit the FLEX equipment storage building. The tours both take place on June 13. Attendees are encouraged to choose one and sign up soon.

Student members can register

for the Student Program during the conference registration process. Participating in the Student Program is a great way to meet other students and professionals at the meeting. Students who fulfill the obligations of the program are eligible for reimbursement of registration fees and a portion of travel costs. Space is limited.

Registration for the meeting is now open. Save by registering before the early bird deadline of May 17. Complete meeting and registration information is available at <http://ansannual.org/>.

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## American Nuclear Society

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*ANS President John Kelly (right) presented the ANS Nuclear Historic Landmark Award to TREAT Division Director David Broussard outside the TREAT control room.*

# TREAT named a Nuclear Historic Landmark

**A**NS President John Kelly traveled to Idaho National Laboratory on March 4 to present an ANS Nuclear Historic Landmark Award commemorating the research performed at the Transient Reactor Test Facility (TREAT). TREAT, which began operating in 1959, can test nuclear fuels and materials under simulated accident conditions. The facility was recently restarted after more than two decades in standby mode.

“The significant work that has taken place at TREAT aligns with the mission of the American Nuclear Society: to advocate for the peaceful application of nuclear science and technology to improve people’s lives,” Kelly said. “The testing performed by TREAT has supported the licensing of modern zirconium alloys, development and qualification of accident-tolerant fuel designs, and validation of fuel response to updated design-basis accidents for new small modular reactor designs.”

Transient testing is an essential component of domestic and interna-

tional efforts to develop robust nuclear fuels and bring innovative reactor technologies to the market. TREAT has contributed to U.S. leadership in the essential nuclear research that supports the generation of carbon-free baseload and load-following electricity by existing and advanced reactors.

“The timely return of transient testing capability to our nuclear energy research portfolio will provide United States leadership in the development of advanced nuclear technologies,” said TREAT Division Director David Broussard. “This achievement is a testament to the hard work of the professionals at the Idaho National Laboratory, the vision of the Department of Energy to preserve this national asset, and the engineering genius of the original designers from Argonne National Laboratory.”

After presenting the Nuclear Historic Landmark Award to Marianne Walck, deputy lab director; David Broussard, TREAT division director; and Dan Wachs, national technical

See **TREAT** on page 6

P R E S I D E N T ' S C O L U M N

# Visits, meetings, and valuable feedback

I continue to enjoy the many opportunities I have as ANS president to attend conferences and meet with members around the country. In this issue of *ANS News*, I would like to describe what I've learned during my recent travel and how a task force is reimagining ANS under the guidance of the Board of Directors.

## Savannah River

In January, I visited the ANS Savannah River Section in Aiken, S.C. I was able to discuss several issues related to nuclear energy with leaders at the Savannah River Site. I was impressed by the breadth of nuclear-related activities at the site and in South Carolina. In the evening, I was warmly greeted by local section members, and I had the opportunity to speak at their dinner meeting. We had a very good dialogue on a wide range of topics, and I was impressed by the attendees' strong interest in all things nuclear. Many thanks to Kevin O'Kula, Tinh Tran, and many others for arranging my visit.

While I was there, section leaders reminded me about the upcoming Nuclear Installations Safety Division topical meeting, PSA 2019. The 2019 International Topical Meeting on Probabilistic Safety Assessment and Analysis will be held April 28–May 3 in Charleston, S.C. The Savannah River Section and the Columbia Section have been working together to host this topical. My good friend Mohammad Modarres, a professor at the University of Maryland, is the technical program chair. I sincerely hope that this meeting is a huge success.

During the same trip I was able to visit the Vogtle-3 and -4 construction site and meet with Steve Kuczynski, chairman, president, and chief executive officer of Southern Nuclear Operating Company. I was encouraged by the progress that has been made on the construction site since 2013, when I last visited. The construction of a nuclear power plant is very complex, but after talking with Steve I could see that things are well in hand. While there have been de-



Kelly

lays, the project is now on track. All indications are that there continues to be strong support in Georgia for completing the project. Hopefully, in approximately three years, two AP1000s will be in commercial operation in Georgia, joining the four that are already operating in China.

## CONTE 2019

In early February I attended the Conference on Nuclear Training and Education in St. Augustine, Fla. It was my first attendance at a CONTE meeting, and I am glad I was able to be there. The biennial meeting is focused on education and training for employees at nuclear installations. In my view, the meeting was very successful. I was impressed by the diversity of the attendees and their interest in the conference. Many thanks to Jane LeClair and others from the Education, Training, and Workforce Development Division, as well as to ANS staff, for organizing and executing this important topical meeting.

## Reimagining ANS

One of the important actions taken during the November 2018 Board of Directors meeting was the formation of a task force that is working to develop a set of actions that will put ANS on a sustainable course for the future. ANS past presidents Bob Coward and Gene Grecheck, as well as several other members, are engaged on the task force. The task force is periodically briefing the Board and receiving valuable feedback. The current plan is for the task force to report to the Board in June at the Annual Meeting in Minneapolis.

I will close by thanking Jim Behrens for organizing the meeting between ANS and the Hoover Institution held in December 2018. A good summary of the meeting is on page 2 of the January/February 2019 issue of *ANS News*. I would also like to thank the ANS Washington, D.C., Section for their financial support of the meeting.—*John Kelly (jekellyans@gmail.com)*

## ANS ORGANIZATION DIRECTORY

The ANS website contains information about constituency groups on the following pages:

### GOVERNANCE BODIES

**Officers**  
[www.ans.org/about/officers](http://www.ans.org/about/officers)  
**Board of Directors**  
[www.ans.org/about/board](http://www.ans.org/about/board)  
**Standing and Special Committees**  
[www.ans.org/about/committees](http://www.ans.org/about/committees)

### DIVISIONS AND SECTIONS

**Professional Divisions**  
[www.ans.org/const/divisions](http://www.ans.org/const/divisions)  
**Local Sections**  
[www.ans.org/const/local](http://www.ans.org/const/local)  
**Plant Branches**  
[www.ans.org/const/plant](http://www.ans.org/const/plant)  
**Student Sections**  
[www.ans.org/const/student](http://www.ans.org/const/student)

### STANDARDS PROGRAM

**Standards Board**  
[www.ans.org/standards/sb](http://www.ans.org/standards/sb)  
**Consensus Committees**  
[www.ans.org/standards/committees](http://www.ans.org/standards/committees)  
**Working Groups**  
[www.ans.org/standards/groups](http://www.ans.org/standards/groups)

### OTHER SEGMENTS

**Alpha Nu Sigma National Honor Society**  
[www.ans.org/const/ansnhs](http://www.ans.org/const/ansnhs)  
**International Alliances/Agreement Societies**  
[www.ans.org/const/international](http://www.ans.org/const/international)  
**Organization Members**  
[www.ans.org/orgmembers](http://www.ans.org/orgmembers)

Additional information is available from the ANS staff listed in the online directory at [www.ans.org/about/staff](http://www.ans.org/about/staff).



# ANS Congressional Fellow begins work for House Science Committee

**A**lyse Huffman is at work in the office of the U.S. House of Representatives Committee on Science, Space, and Technology as the 2019 ANS Glenn T. Seaborg Congressional Fellow. *ANS News* checked in with Huffman in late February, during her seventh week on the job.



Huffman

Alyse Scurlock was engaged to be married when she was named Congressional Fellow in June 2018 (*ANS News*, July/August 2018, p. 4). A short time after her December 22 wedding to fellow ANS member and Duke Energy engineer Nathan Huffman, she relocated to the Washington, D.C., area to begin her fellowship.

Huffman's first weeks as a congressional fellow were spent meeting people and getting oriented. Then she was obliged to move once again, this time because she and her colleagues, who work on what is now the majority side of the House Science Committee, relocated to a larger office space. The

move was instigated by the shift in majority control of the House following the November 2018 midterm election.

"We have a *lot* more work than when we were in the minority," Huffman said. "I was assigned primary and secondary issue areas, and in addition to nuclear energy within the Department of Energy, I also am working on fuel cell technology, the energy-water nexus, fusion science, hydrokinetic marine power, biological and environmental research, geothermal energy, and the list goes on."

Huffman meets with industry, national laboratory, and nongovernmental organization stakeholders within those issue areas, and she spends a lot of time preparing for hearings. In early March she led a hearing of the Energy Subcommittee on the energy-water nexus, which is also the subject of a bill—H.R. 34, the Energy and Water Research Integration Act of 2019—introduced by committee chair Eddie Bernice Johnson and ranking member Frank Lucas on January 3.

"Essentially, this issue boils down to the relationship between energy and water," Huffman explained. "It takes a lot of energy to produce water, and

a lot of water to produce energy. For example, nuclear power plants use water to create power. In some areas, when the climate gets too cold or too hot, it is more difficult to obtain the water necessary to operate the plant optimally."

Huffman interviewed leaders in the field to try to find the best subject matter experts to provide testimony for the hearing.

"The rest of my time is spent working on legislation to address issues within my portfolio," Huffman said. "I must incorporate stakeholder input as best I can, and also meet with folks across the aisle and even across chambers to help give legislation the best success path forward."

Huffman believes that congressional fellowship sponsorship is very beneficial for ANS. "The American Association for the Advancement of Science fellowship program is highly regarded, and there are many previous fellows working in Congress who recognize the talent pipeline of the fellowship," she said. "I get to perform extremely important work and am given a lot of responsibility because of this relationship."

# WISE student prepares for summer internship in Washington, D.C.

**M**argaret Jones, a junior at Kansas State University, has been selected to participate in the 2019 Washington Internships for Students of Engineering (WISE) program with the sponsorship of ANS. She will join other engineering undergraduates for nine weeks in Washington, D.C., beginning on June 2.

Jones is following the nuclear track offered by Kansas State's Department of Mechanical and Nuclear Engineering and will graduate with a degree in mechanical engineering with a nuclear option. "As an interdisciplinary



Jones

student, I appreciate the flexibility of K-State's mechanical and nuclear engineering program. I have been able to earn a minor in French language and study for a semester as an exchange student at Université Clermont Auvergne in Clermont-Ferrand, France," Jones said.

Jones and the WISE interns sponsored by other engineering associations will meet with leaders in the

U.S. Congress, the administration, and federal agencies, including the Department of Energy's Office of Nuclear Energy and the Nuclear Regulatory Commission. "My goals for the WISE internship include networking, improving my research skills, and learning more about the relationship between our government, public policy, and nuclear engineering," Jones said.

WISE interns conduct individual research on an engineering-related public policy issue and write a paper for presentation at the end of the summer and publication online in the *WISE*

See **WISE** on page 7

## CAPITOL CRITICAL

## Two very different nuclear debates

BY CRAIG PIERCY,  
ANS WASHINGTON REPRESENTATIVE

Washington has been enthralled by the debate over the Green New Deal. If you have been watching at all, you're familiar by now with the congressional resolution introduced by newly elected Rep. Alexandria Ocasio-Cortez (D., N.Y.) and Sen. Ed Markey (D., Mass.), which calls for "meeting 100 percent of the power demand in the United States through clean, renewable, and zero-emission energy sources."

Nothing happens in D.C. these days without a dose of controversy, in this case courtesy of a fact sheet issued by Ocasio-Cortez's office on the day of the introduction describing new nuclear plants as "unnecessary." Ocasio-Cortez and Markey subsequently retracted the document, placing blame for the confusion on "bad copy," but the incident nonetheless served to throw gasoline on the already-simmering argument in the U.S. environmental community over the necessity of nuclear energy to achieve deep decarbonization.

For sure, a renewed public conver-

sation on nuclear and climate change is a good thing, but let's also recognize this episode for what it is: a heated debate over the wording of a minor provision in a nonbinding resolution that has exactly ZERO chance of passage in the current session of Congress.

Meanwhile, 2,000 miles to the west, a much more measured, practical discussion of nuclear energy is unfolding, as Utah Associated Municipal Power Systems (UAMPS) continues to pursue commitments from its members to purchase electricity from the Carbon Free Power Project—the first deployment of NuScale Power's small modular reactor in the United States.

In many ways, the Salt Lake City area is the perfect test case for the value proposition of advanced nuclear. Utah's business-friendly climate (and world-class skiing and snowboarding) has made it a job magnet for the high-tech and financial sectors. The state's population is projected to nearly double by 2065, and electricity consumption has been growing steadily. While Utah's politics are certainly "red," there is also a pragmatism here that is hard not to notice. Take the climate change issue, for example. While climate skepticism exists here as elsewhere, there is also recognition that binding carbon constraint is likely to be a future regulatory reality. Salt Lake City also suffers frequent inversion layers—the

mountains of the Wasatch Range and a layer of warm air hanging over the valley trap a layer of cold air and pollution at ground level—often causing nasty "code red" air quality days during the winter months.

Currently, about two-thirds of Utah's electricity generation comes from coal, including several plants that will reach the end of their operational life spans in the next decade. UAMPS has looked at the options—including clean coal, natural gas, solar, wind, and storage—and determined that the reliable, non-emitting baseload generation provided by nuclear represents the best path forward to meet the region's energy, economic, and environmental objectives.

Sitting in a Millennial Nuclear Caucus event at the Utah State Capitol in February, I was struck by the civility of the affair, as representatives from UAMPS, the Department of Energy, Idaho National Laboratory, and Utah Governor Gary Herbert's energy office fielded questions from the audience of state legislators, business leaders, students, and even a few nuclear skeptics.

The questions were respectful and the answers forthright. Cost and waste were focuses of the conversation, but so were the long-term health and economic vitality of the region. After the event concluded, both "pro" and "anti" stayed behind to mingle over lemonade and crudités.

I am sure that the recent kerfuffle over nuclear and the Green New Deal will help shape the debate in Washington, but I can't help feeling that what is happening in Utah now is somehow much more significant for the future of nuclear.—[cpiercy@ans.org](mailto:cpiercy@ans.org)

## Nuclear PE exam survey needs input from professional engineers

The National Council of Examiners for Engineering and Surveying (NCEES) and the ANS Professional Engineering Examination Committee (PEEC) are inviting licensed professional engineers working in the nuclear field to participate in a Professional Activities and Knowledge Study (PAKS) that will be used to develop new exam spec-

ifications for the nuclear Principles and Practice of Engineering (PE) examination.

Participants are asked to complete an [online survey](#) about the professional activities, knowledge, and skills of a licensed nuclear engineer by **April 10**. The survey takes about 45 minutes or less to complete. As an incentive, the PEEC will award

1.0 hours of Continuing Professional Competency credit to P.E.s who participate.

More information about the survey can be found on page 7 of the January/February 2019 issue of *ANS News*. For additional information, visit [www.ans.org/pe/](http://www.ans.org/pe/) or contact John Bennion, P.E., chair of the PEEC, at [NuclearPAKS@ans.org](mailto:NuclearPAKS@ans.org).

# 2019 Gold and Silver certificate recipients

Certificates commemorating 25 or 50 years of ANS membership are being delivered to the members listed below. The Gold certificate recipients are celebrating

50 years of ANS membership in 2019, having joined in 1969. The Silver certificate recipients, who joined ANS in 1994, have maintained ANS membership for 25 years.

## Gold Certificate Recipients

Charles E. Ahlfeld	Ray M. Crawford Jr.	Hans F. Hantke	Michael Ross	Roger L. Stover
Kazys K. Almenas	David J. Diamond	Robert T. Harris	Harold L. Rothstein	Richard G. Taylor
R. James Ansell	Nils J. Diaz	Robert E. Henry	Genn Saji	Roger W. Tilbrook
H. Brock Barkley Jr.	Charles J. Divona	Norman E. Holden	Jimmy D. Schottel	Tom R. Tramm
Nico M. Bonhomme	Vincent J. Esposito	Walton L. Jensen	Brian G. Schultz	Nick Tsoulfanidis
Lloyd Bonzon	Oliver A. Farabee	John C. Lee	C. Frederick Sears	William G. Vernetson
Harry J. Capossela	Leslie Fitz	Yung S. Lu	Ken Shultis	Norman E. Wandke
Lawrence Chandler	Brian R. Frost	Hans R. Lutz	George J. Silvestri Jr.	Bernard W. Wehring
Douglas M. Chapin	Luis Galvez-Cruz	Alan M. Nakashima	David H. Smith	
Alan M. Chodorow	Lancelot J. Garvin III	Sam S. Nargolwalla	James L. Snelgrove	
John G. Cobb Jr.	Kenneth A. Gasper	Ronald E. Reder	Michael C. Stauber	

## Silver Certificate Recipients

Robert J. Agasie	W. Edward Cummins	Ajaya K. Gupta	Sheikh T. Mahmood	William L.
Trent C. Andes	Paul F. Czaya	Sophie I. Gutner	James Mallon	Simmermon
Wayne L. Andrews Jr.	Lawrence R. Dausin Jr.	Richard D. Hagler	Steven F. McCoy	Shivi P. N. Singh
Tamer Bahadir	Anthony Dimitriadis	Mark C. Handrick	Fernando	Russell N. Stein
Thomas Bandurski	Robert J. Dodson	Charles D. Harmon	Mireles-Garcia	Rebecca L. Steinman
Andrew S. Barritt	Pratap K. Doshi	Ayman I. Hawari	Thomas E. Mistler	Joseph R. Stencil
John R. Bartels	Ronald A. Duff	Katsumi Hayashi	Robert E. Moody	Anthony L. Stevens
Terry A. Beltz	Abdul R. Dullo	Christopher M.	Scott W. Mosher	John R. Stokley
Sama Bilbao y León	Mary Lou	Henderson Jr.	William L. Myers	Chayut Suwanbosi
Michel R. Billaux	Dunzik-Gougar	Patrick J. Higgins	John C. Nagle	Dan Tallman
Bruce M. Biwer	Geoffrey R. Egan	Greg H. Hobson	Vickram F. Nazareth	Marlene J. Taylor
John L. Bliss	Roman M. Estrada	Claude J. Holle	Eleodor M. Nichita	Luisa M. Torres
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John A. Bounds	Phillip J. Finck	Donald R. Horn	Donald W. Olson	Patrick W. Turrentine
Robert L. Bratton	Suzanne	Peter M. Jackson	Mohamed Ouisloumen	Larry A. Wagner
Richard R. Brey	Fletcher-Mallinson	Richard Janati	Santiago A. Parra	Thomas E. Ward
Richard W. Brock	Berry J. Foster	James S. Jhun	Gopal J. Patel	William R. Ward
Nicholas W. Brown	Christen M. Frankle	Young G. Jo	Imre Pázsit	Ann D. Winters
Randall D. Buss	Brian J. Gardes	Dwight J. Johnson	James E. Petty	Qiao Wu
Robert G. Byram	Robert W. Garland	Philip H. Johnson	George P. Pilicy III	Bao-Wen Yang
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Heather J. M.	Niko V. Gjaja	Eric A. Larson	Quirino-Torres	
Chichester	Ronald K. Golub	David R. Lewis	Dudley A. Raine III	
Eric P. Clements	Hans D. Gougar	Kenneth D. Lewis	Geoffrey Rothwell	
Jeff Combs	Kristine L. Goversen	John D. Leyba	Arthur E. Ruggles	
Clayton M. Condit	Robert J. Gregg	Michael N. Lima	Robert J. Salm	
George L. Constable	Miles Greiner	Paul W. Lisowski	Charlotta E. Sanders	
Steven R. Cook	Patrick J. Griffin	April E. Lloyd	Robert L. Sandstrom	
Don K. Croneberger	Robert E. Grove	Gregg W. Ludlam	Norman C. Shepard III	

## TREAT, continued from page 2

lead for fuel safety research, Kelly had the opportunity to tour TREAT, the Experimental Fuels Facility, and the Irradiated Materials Characterization Laboratory.

ANS established the [National Historic Landmark Award](#) 33 years ago to commemorate nuclear facilities that have demonstrated outstanding accomplishments which were instrumental in the advancement and

implementation of nuclear technology and the peaceful use of nuclear science.

Visit the ANS website at [www.ans.org](http://www.ans.org) for a full listing of ANS Historic Landmark sites.



# Celebrating NIMBY grant successes as program enters second year

**T**he Nuclear in My Backyard (NIMBY) grant program was created to put funding in the hands of ANS members with innovative ideas for products, programs, or activities that can demonstrate benefits to ANS and the nuclear community.

The ANS Operations and Power Division (OPD) established the program in 2018 with multiple goals: developing the professional skills and knowledge of ANS members, advancing nuclear science and technology through collaboration and outreach, meeting the needs of ANS utility and supplier members, connecting with the public, and engaging policymakers (*ANS News*, May/June 2018, p. 2). The program was organized by past OPD chair Vince Gilbert after the OPD absorbed the activities of the Special Committee on Nuclear in the States, which had issued a request for proposals called “Nuclear in Our Backyard” in early 2017.

The OPD has followed the progress of local and student section grant recipients over the past year, and the successes and future plans of recipients are described below. Read on to find out how you can apply for a NIMBY grant in 2019.

## ANS Engage

A NIMBY grant has provided the funding needed to shift *ANS Engage*—an online advocacy program coor-



*Admission to the ANS Idaho Section’s “STEM at the Museum” event was offered free of charge to nearly 900 students.*

inated by the ANS Washington Office—to a new software platform, VoterVoice. The improved platform makes it easier for ANS members to amplify their voices on Capitol Hill and is better able to target state and regional legislation.

The ANS Washington Office has successfully run three campaigns since adopting the new software. The first urged members to support H.R. 3053, the Nuclear Waste Policy Amendments Act of 2018, and the response demonstrated that nuclear waste policy is a high priority for ANS

members. A total of 684 letters and tweets were sent to 233 members of Congress, and the bill passed with 340 “yes” votes, a new high-water mark for nuclear waste legislation. The second major campaign centered on S. 3422, the Nuclear Energy Leadership Act. ANS members were asked to contact their legislators and urge them to cosponsor the bill or support it on the floor. As a result, 494 emails were sent to 76 senators, with senators from Pennsylvania, Ohio, and Tennessee receiving a significant

*See NIMBY on page 8*

## WISE, continued from page 4

*Journal of Engineering and Public Policy* ([www.wise-intern.org/journal/index.html](http://www.wise-intern.org/journal/index.html)). Jones is eager to take on the challenge. “I am currently taking my university’s Written Communications for Engineers course,” she said, “so I should be well prepared.”

Alan Levin, an ANS Fellow and senior technical advisor in the DOE’s Office of Nuclear Safety, is the coordinator of the ANS WISE program. He has mentored ANS interns for more than 25 years, offering assistance with their

research and serving as the principal technical reviewer of their papers.

Jones is interested in studying the environmental implications of nuclear power. “The relationship between nuclear power and environmental protection is interesting because nuclear power provides a great opportunity to generate large quantities of power without contributing to climate change, but it can be harmful to our environment in other ways,” Jones said. “I am still exploring potential research topics, but I would like to focus

on how nuclear waste can be disposed of or reused to cause the least amount of damage to the environment and population, or can be reused to beneficially impact these groups.”

Jones plans to graduate in May 2020. Her long-term goals include attending law school to study environmental and natural resource law. “The WISE internship seemed like a great opportunity to learn more about how environmental regulations and public policy impact the nuclear power industry,” she said.

**NIMBY**, continued from page 7

number of those emails. The final campaign was a micro-targeted invitation for ANS members to write their representatives and ask them to vote “yes” on H.R. 6351, the Advancing U.S. Civil Nuclear Competitiveness and Jobs Act. The goal was to pass the bill out of the Committee on Commerce and Energy and to the full House for consideration. Twenty-nine members sent emails to 13 representatives, and the ANS letters of support were mentioned during the committee hearing as the bill was passed.

During 2019, campaigns that are not tied to a specific piece of legislation will be launched through ANS Engage. Potential campaign topics include support for nuclear energy, support for nuclear as a clean energy technology, and the importance of developing a strong nuclear workforce. Project coordination is provided by ANS Washington Representative Craig Piercy.

**Idaho Section STEM support**

The ANS Idaho Section is using a two-year grant to improve and broaden science, technology, engineering, and mathematics (STEM) education statewide. A “STEM at the Museum” event was held in October 2018 at the Museum of Idaho in Idaho Falls, Idaho. NIMBY support was used to rent the museum for the day and into the evening hours, and to allow students and teachers to visit at no charge. Almost 900 students in grades 1–10 attended the event, representing seven charter schools in Idaho Falls.

Expansion of the program into other parts of the state is planned for 2019. Project coordination is provided



*The ANS Las Vegas Section and the ANS University of Nevada–Las Vegas Student Section collaborated to present a Nuclear Science Merit Badge workshop at the National Atomic Testing Museum in Las Vegas, Nev., in the fall of 2018.*

by ANS member Catherine Riddle.

**Las Vegas Scout workshops**

The ANS Las Vegas Section and the ANS University of Nevada–Las Vegas Student Section have undertaken a project to create Nuclear Science Merit Badge workshops and other resources for young people in the Las Vegas, Nev., area. The work began in September 2018, and resources have been collected to create a manual for presenting workshops in Nevada, which will include descriptions of

demonstrations as well as slide decks for classroom presentations. Completed work will be shared with all interested ANS local sections. Project coordination is being provided by ANS member Steve Curtis.

**Speaking up for Yucca Mountain**

Members of the ANS Las Vegas Section are using a NIMBY grant to increase public support of the Yucca Mountain project in Nevada. Activities include hosting seminars, publishing

*See NIMBY on page 9*

## Watch “Creating Teacher Workshops” webinar, now archived online

**D**id you miss “Navigating Nuclear Science: Creating Teacher Workshops”? View the [webinar](#) now to learn how to create professional development opportunities tailored to your local teachers’ needs.

In the webinar, ANS members

Candace Davison, Mary Lou Dunzik-Gougar, Eric Loewen, and Bill Wabbersen introduce teacher-tested resources and a new, customizable approach to creating teacher workshops that incorporate national science standards and [Navigating Nuclear: Energizing Our World](#), ANS’s K–12 nuclear

science and technology curriculum.

The archived webinar includes all presentations as well as a question-and-answer discussion. For more information about Navigating Nuclear or the webinar, please contact Janice Lindgard, ANS Education Specialist, at [outreach@ans.org](mailto:outreach@ans.org).



**NIMBY**, *continued from page 8*

white papers, and participating in local talk-radio interviews to focus public discussion on the economic and technology benefits of the project. An initial seminar drew more than 100 guests, and additional events and media communications are being planned for 2019. ANS member Steve Curtis also coordinated this project.

**Documenting ANS benefits**

A NIMBY grant has been awarded to Generation Atomic, led by ANS member Eric Meyer, for a series of videos to be used as Society marketing resources. The pilot effort promotes the benefits of ANS membership and makes the public more aware of the role ANS plays in the nuclear industry, both nationally and internationally. Interviews and video footage were recorded in November 2018 during the ANS Winter Meeting in Orlando,

Fla. A rough cut of the video series is now being reviewed by the ANS staff for targeted distribution in 2019. Project coordination is being provided by ANS Membership and Marketing Director Dan Goldberg.

**Apply for 2019 grants**

Applications are now being accepted for new NIMBY grants. Gilbert sees the program as an opportunity to rejuvenate local sections—to “drive membership by serving utilities.” His message to utilities is: “We have money to help your plant, but if you want our help you need to support a local section.”

Proposals do not need to be directly related to nuclear power plant operations to receive funding, but the proposal must show how the Society will benefit from the initiative and include a schedule with milestones to measure progress. The proposal should also describe how the program or product

could become self-sufficient or achieve its final goal in a reasonable time frame, such that it would no longer require grant funding.

ANS members are encouraged to be creative and not to restrict ideas based on a dollar amount. The grant budget is limited, however, and it cannot support large-scale projects such as research. Applications will be reviewed on a quarterly basis by at least three OPD committee members, and awards will be based on merit. The process is “simple and quick,” Gilbert said. “If it’s a good idea, it will be approved.”

A local section’s involvement is required to ensure continuity in the management of the project and the funds received. The OPD will assign a project manager from its executive committee to see a project through the grant cycle, which may last up to two years.

Please contact Gilbert with questions at [vgilbert1973@gmail.com](mailto:vgilbert1973@gmail.com).

## The ANS Code of Ethics

The ANS Code of Ethics was approved by the Special Committee on Ethics on November 17, 2002, and by the Board of Directors on June 5, 2003. The code is printed below in its entirety and is also available on the ANS website at [www.ans.org/about/coe](http://www.ans.org/about/coe).

**Preamble**

Recognizing the profound importance of nuclear science and technology in affecting the quality of life throughout the world, members of the American Nuclear Society are committed to the highest ethical and professional conduct.

**Fundamental principle**

ANS members as professionals are dedicated to improving the understanding of nuclear science and technology, appropriate applications, and potential consequences of their use.

To that end, ANS members uphold and advance the integrity and honor of their professions by using their knowledge and skill for the enhancement of human welfare and the environment; being honest and impartial; serving with fidelity the public, their employers, and their clients; and striving to continuously improve the competence and prestige of their various professions.

**Principles of professional conduct**

ANS members shall subscribe to the following practices of professional conduct:

1. We hold paramount the safety, health, and welfare of the public and fellow workers, work to protect the environment, and strive to comply with the principles of sustainable development in the performance of our professional duties.

2. We will formally advise our employers, clients, or any appropriate authority and, if warranted, consider further disclosure, if and when we perceive that pursuit of our professional duties might have adverse consequences for the present or future public and fellow worker health and safety or the environment.
3. We act in accordance with all applicable laws and these practices, lend support to others who strive to do likewise, and report violations to appropriate authorities.
4. We perform only those services that we are qualified by training or experience to perform, and provide full disclosure of our qualifications.
5. We present all data and claims, with their bases, truthfully, and are honest and truthful in all aspects of our professional activities. We issue public statements and make presentations on professional matters in an objective and truthful manner.
6. We continue our professional development and maintain an ethical commitment throughout our careers, encourage similar actions by our colleagues, and provide opportunities for the professional and ethical training of those persons under our supervision.
7. We act in a professional and ethical manner toward each employer or client and act as faithful agents or trustees, disclosing nothing of a proprietary nature concerning the business affairs or technical processes of any present or

See **Code of Ethics** on page 10

# Nominations now being accepted for 2019 ANS Winter Meeting awards

**F**or over 50 years, the exceptional accomplishments of nuclear science and technology professionals have been recognized by the ANS Honors and Awards program.

The recipients of the national awards listed below will be honored on November 18 during the opening plenary session of the ANS Winter Meeting in Washington, D.C., with the exception of the Nuclear Historic Landmark Award. Honorees will be notified of their selection by October.

All members are encouraged to review the nomination requirements for these awards and consider nominating a qualified colleague. Many ANS awards are open to non-ANS members, and nominating colleagues who are not members is one way to foster new ANS relationships.

More information on each of the awards described below, including past award recipients and nomination forms, is available at [www.ans.org/honors/awards/nawards/](http://www.ans.org/honors/awards/nawards/). If you have any questions about a specific award,

please contact Hussein Khalil, chair of the Honors and Awards Committee, at [honors@ans.org](mailto:honors@ans.org).

Several awards administered by ANS professional divisions also have nomination deadlines in 2019. Visit [www.ans.org/honors/awards/dawards/](http://www.ans.org/honors/awards/dawards/) for a list of those awards.

The deadline for submission of nominations for Winter Meeting awards is **August 1**. Because of the large number of nominations typically submitted, late nominations are not accepted.

## ANS NATIONAL AWARDS

■ **E. Gail de Planque Medal**—Presented to women whose lifetime or singular achievements have resulted in tangible benefits to the field of nuclear science and engineering.

■ **Distinguished Public Service Award**—Presented to a public servant who has demonstrated leadership in energy policy formulation and public enlightenment and has made significant national and international contributions toward the betterment of mankind.

■ **Distinguished Service Award**—Presented to an ANS member for contributions to the development and understanding of the goals and policies of the Society or for outstanding nontechnical contributions to nuclear science and engineering.

■ **Dwight D. Eisenhower Medal**—One of three top-tier awards of the Society, this medal is presented to individuals in recognition of public policy leadership or contributions to the field of nuclear nonproliferation and honors sustained excellence worthy of international recognition.

■ **Fellow of ANS**—This designation, the highest grade of ANS membership, is attained on the basis of professional accomplishments through nomination by peers and election by the Honors and Awards Committee and the Board of Directors.

■ **Landis Public Communication and Education Award**—Presented to individuals or organizations whose personal efforts, dedication, and accomplishments have furthered

public understanding of the peaceful applications of nuclear science and technology.

■ **Nuclear Historic Landmark Award**—Presented to a site or facility to memorialize accomplishments that were instrumental in the advancement and implementation of nuclear technology and the peaceful uses of nuclear energy. Sites or facilities must have been placed in service at least 20 years prior to nomination.

■ **Mary Jane Oestmann Professional Women's Achievement Award**—Presented to women for outstanding technical achievements.

■ **Reactor Technology Award**—Presented in conjunction with the Atomic Energy Society of Japan to individuals who have made original contributions to the advancement of reactor technology, especially advances in reactor technology design and safety.

■ **Seaborg Medal**—One of three top-tier awards of the Society, this medal is presented to individuals in recognition of scientific or engineering research achievements associated with the development of the peaceful uses of nuclear science and honors sustained excellence worthy of international recognition.

■ **Alvin M. Weinberg Medal**—Presented to individuals in recognition of international technical and policy leadership in nuclear science and technology that contributes to the understanding of the social implications of nuclear technology.

### Code of Ethics, *continued from page 9*

- former client or employer without specific consent, unless necessary to abide by other provisions of this code or applicable laws.
8. We disclose to affected parties known or potential conflicts of interest or other circumstances that might influence, or appear to influence, our judgment or impair the fairness or quality of our performance.
  9. We treat all persons fairly.

10. We build our professional reputation on the merit of our services, do not compete unfairly with others, and avoid injuring others, their property, reputation, or employment.
11. We reject bribery and coercion in all their forms.
12. We accept responsibility for our actions; are open to and acknowledge criticism of our work; offer honest criticism of the work of others; properly credit the contributions of others; and do not accept credit for work not our own.

# The ANS Social Media Team continues to expand

**T**he ANS Social Media Team is more than 30 members strong and growing. The team was organized to network and share pronuclear messaging via the expanding and ever-shifting platforms of social media, and ANS members with at least one active social media account, such as Twitter or Facebook, are encouraged to join.

Robby Kile recently joined the team. “The ANS Social Media Team has been a great resource,” he said, “not only for helping ANS itself communicate the value of nuclear science and technology, but for helping nuclear advocates learn from others how they can improve their own digital advocacy skills by creating a network of digital activists.”



Alan Medsker identifies himself as a “nuclear layperson” who hasn’t had much formal training in nuclear. Yet he is an ANS member with a commitment to spreading the message that nuclear power is a necessary part of the fight against climate change. “Being involved in the ANS Social Media Team has been interesting, and even a little challenging for me,” he said. “I am always learning from other teammates. I’m also more aware of what ANS is doing in areas outside what I might otherwise pay attention to, which expands my horizons.”

Each team member agrees to follow ANS social media on [Twitter](#), [Facebook](#), [Instagram](#), [LinkedIn](#), and

the [LinkedIn discussion page](#), and share, like, and retweet as many of the Society’s posts as possible. Team members also contribute at least one story a year to the [ANS Nuclear Cafe](#) blog, help build the network by sharing and retweeting fellow team members’ nuclear-related posts, and talk to friends, colleagues, and other ANS members about the team.

The Social Media Team was launched during the 2016 ANS Winter Meeting by ANS’s online communications specialist, Linda Zec ([ANS News](#), March/April 2018, p. 8).

“There is a saying that the ‘team-work makes the dream work.’” Zec said. “I applied this thought to the Society’s social media and have a team of talented, committed, and creative members. They are dedicated to nuclear technology, ANS, and pushing out the pronuclear messaging. I am grateful for their enthusiasm and all they do. I encourage other ANS members to contact me about joining the team.”

Team members who recently joined include River Bennett, Anna Biela, Duriem Calderin, Jim Conca, Robert Corrigan, Alyse Huffman, Robby Kile, Aries Loumis, Alan Medsker, Christopher Morrison, Erik Olson, Karl Pauls, Sebastian Ritter, Erick Sanchez, Will Searight, Pierre-Clément Simon, and W. A. “Art” Wharton.

All ANS members, whether they are on the Social Media Team or not, are encouraged to use the following hashtags when tweeting nuclear-related messaging: #AdvancedReactors, #ANSMeeting (for any ANS meeting), #cleanair, #energy, #nuclear, #nuclearenergy, #nuclearmedicine, #nuclearpower, #supportnuclear, #nuclearrocks, #pronuclear, and #WhyNuclear.

ANS members who want to join the [Social Media Team](#) should contact Zec at [lzec@ans.org](mailto:lzec@ans.org), or by phone at 708/579-8240.

## UPCOMING MEETINGS

- **2019 ANS Student Conference**, April 4–6, Richmond, Va.
  - **International High-Level Radioactive Waste Management (IHLRWM 2019)**, April 14–18, Knoxville, Tenn.
  - **International Topical Meeting on Probabilistic Safety Assessment and Analysis (PSA 2019)**, April 28–May 3, Charleston, S.C.
  - **2019 ANS Annual Meeting**, June 9–13, Minneapolis, Minn.
  - **Utility Working Conference and Vendor Technology Expo**, August 4–7, Amelia Island, Fla.
  - **19th International Conference on Environmental Degradation of Materials in Nuclear Power Systems—Water Reactors**, August 18–22, Boston, Mass.
  - **18th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-18)**, August 18–23, Portland, Ore.
  - **International Conference on Mathematics and Computational Methods Applied to Nuclear Science and Engineering (M&C 2019)**, August 25–29, Portland, Ore.
- [www.ans.org/meetings](http://www.ans.org/meetings)



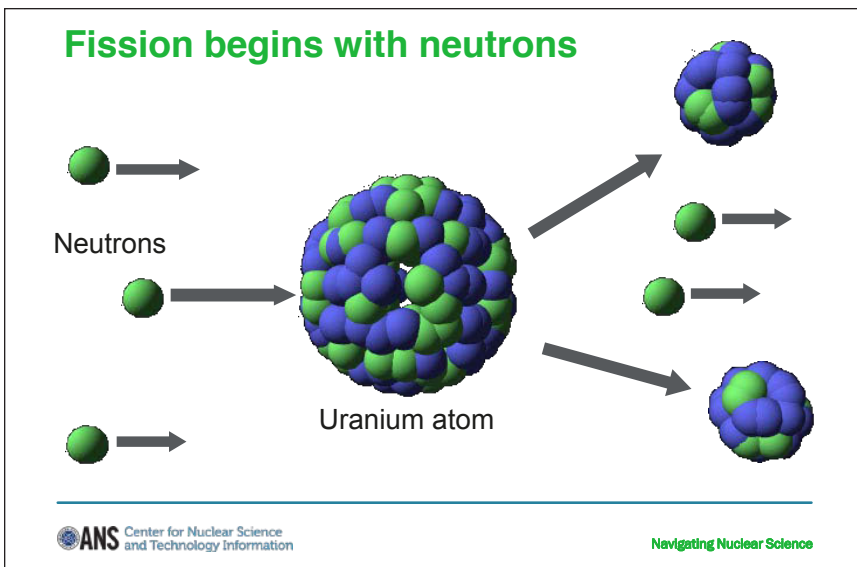
# New presentations key to successful teacher workshops

**A**NS members and staff have created a series of Power-Point presentations that provide the tools needed to successfully share information about the benefits of nuclear science and technology with teachers and students. The presentations cover essential nuclear topics and link to ANS-created lessons as well as to *Navigating Nuclear: Energizing Our World*, a K–12 STEM education program developed by ANS and Discovery Education.



ANS members Candace Davison, Mary Lou Dunzik-Gougar, Eric Loewen, and Bill Wabbersen have years of experience leading teacher workshops during ANS Annual and Winter Meetings. They collaborated with ANS Education Specialist Janice Lindgard to develop the presentations, which are currently available for five workshop modules: Radiation Basics; The Nuclear Fuel Cycle; Measuring Radiation; Nuclear Power: Fission, Fusion, and the Future; and Visualizing Nuclear Processes.

“ANS has a long history of conduct-



*The presentation on Nuclear Power: Fission, Fusion, and the Future contains this slide and 42 more.*

ing workshops that give educators the information they need to teach nuclear science and technology with confidence,” said Loewen, a former ANS president (2011–2012) and leader of the subject matter expert team for *Navigating Nuclear*. “Teachers reach, on average, more than 30 students in each class they teach. Through educating teachers, we reach many thousands of students.”

The presentations are ready to use and feature compelling images provided by national laboratories and

ANS local sections. Talking points for the presenter are included in the slide notes, as are links to activities and suggestions on when to include them. While the presentations are locked for editing, workshop presenters can save a copy and update the title slide with relevant details about their presentation, such as the name of the presenter, the date, and the audience.

“You can produce a workshop from any one of the modules that will give teachers the information they need to

See **Workshops** on page 13

# Betsy Tompkins says farewell after 40-year career at *Nuclear News*

**B**etsy Tompkins, editor and publisher of *Nuclear News* and publisher of *Radwaste Solutions* and *ANS News*, retired on February 28 after 40 years at ANS. In the days and weeks before her departure, ANS staff and members found many ways to share their appreciation and congratulations on a job well done.

“Betsy’s dedication to ANS, the Commercial Publications Department, and *Nuclear News* have been evident



*Tompkins*

in every issue of the magazine, and she will be missed,” said ANS Executive Director Robert Fine. “We all wish Betsy well in her retirement.”

Tompkins was hired as an editorial assistant in 1976, and her diligent work and dedication led to increasing

responsibility. The titles she has held over the years include production editor, associate editor, senior editor, managing editor, and director of Commercial Publications. She saw *Nuclear News* transition from typewritten and typeset copy to fully digital in-house production, and she contributed to the production of special reports on the Three Mile Island, Chernobyl, and Fukushima Daiichi accidents.

See **Tompkins** on page 14

**Workshops**, continued from page 12 teach nuclear science,” said Lindegard. While the presentations were designed for teacher professional development workshops, they can easily be adapted by a teacher for classroom use.

Links to the presentations will soon be available on the Navigating Nuclear landing page of ANS’s public information website, [NuclearConnect.org](http://NuclearConnect.org).

There you will also find a description of the presentations and suggestions on how to use them.

“How you would configure a workshop depends on the goal of your workshop, the amount of time available, and the knowledge that the participants bring to your experience,” Lindegard said.

A two-hour workshop can intro-

duce the basics of radiation, including different kinds of radiation, characteristics, and half-life. “These basics are fundamental to students being able to succeed, and they are something that national science standards require teachers to know and teach,” Lindegard said. Given more time, it is possible to present all five modules in a full-day workshop.

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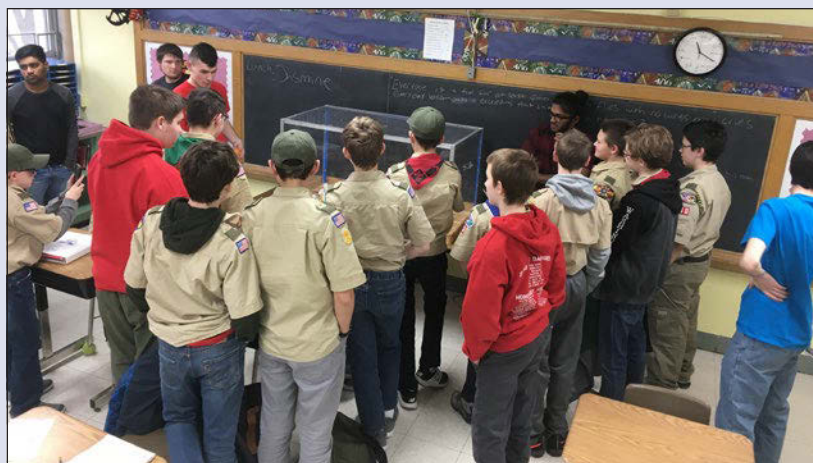
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**ANS UIUC SECTION MEMBERS LED TWO GROUPS OF SCOUTS** through the requirements to earn a Boy Scout Nuclear Science Merit Badge on March 2 at Holy Cross School in Champaign, Ill. Ten members of the ANS University of Illinois at Urbana-Champaign Student Section taught and led demonstrations, such as the mousetrapped reactor fission demonstration pictured above, during the two four-hour classes. About 40 Scouts each earned a badge after learning about the basics of the atom, how fission works, and the goals of current nuclear research. "It was a great experience for our ANS members to learn how to teach a younger audience and answer questions," said Isabella Iaccino, the section's outreach chair. "The Scouts were involved and active, asking tons of questions and exploring both theory and applications of nuclear science."

**Tompkins, continued from page 12**

"While I can't say that I will miss the relentless deadlines of a monthly magazine, I can say that I will miss my friends and colleagues at ANS and the challenges of editorial work," Tompkins said. "One of the most rewarding things about producing a magazine is having a product to show for all the hard work that has gone into it each month. That is something that never gets old. Many thanks to my coworkers and to many ANS members for their well-wishes as I now set my own schedules, turn some new pages, and write some new life stories."

Succeeding Tompkins at the helm of *Nuclear News* is Michael McQueen, who joined the magazine's staff in 2012 as an associate editor. In January, Rick Michal, formerly director of the ANS Scientific Publications Department, became director of the new ANS Publications Department, which combines ANS's commercial and scientific publications.

**NEW MEMBERS**

The ANS members and student members listed below joined the Society in December 2018 and January 2019.

**A**

- Alvarenga, M. A. Bayout, Brazilian Nuclear Energy Commission
- An, Yeji, Chosun University (South Korea)
- Andrasko, James P., American Electric Power
- Anushko, Keith, Maxeta Technologies

**B**

- Bailey, Michael E., Bailey Engineering Services
- Baird, Richard, Florida Power & Light
- Barron, William, Ontario Power Generation
- Basta, Laura A., Duke Energy
- Belanger, Jacques J., California Polytechnic State University
- Bez, Jeremy, Institut de Radioprotection et de Sûreté Nucléaire (France)
- Bondre, Jayant, Spent Fuel Consulting
- Botti, Stefano, SIET (Italy)
- Boucher, Paul, Bruce Power
- Boutin, Warner
- Bruneau, Robert J., Sandia National Laboratories
- Bryan, Jerry

**C**

- Carroll, Robert, Fluor Marine Propulsion

- Casto, Charles, Casto Group
- Challamel, Yann, Rolls-Royce Civil Nuclear (France)
- Church, Gabe, Electric Power Research Institute
- Cotter, James D., Entergy Generation

**D**

- Dahms, A. Stephen, San Diego State University
- Dawson, Lon, Sandia National Laboratories
- Dempsey, Paul, Exelon Nuclear
- Di Buono, Antonio, University of Manchester (U.K.)
- Donaldson, Brandy, Exelon Generation
- Downs, Michael P., NuScale Power

**F**

- Favalli, Andrea, Los Alamos National Laboratory
- Filatov, Alexey, Pressinform (Estonia)
- Fiorina, Carlo, École Polytechnique Fédérale de Lausanne (Switzerland)
- French, Michelle, WECTEC

**G**

- Gallego, Nidia C., Oak Ridge National Laboratory
- Gao, Yipeng, Idaho National Laboratory
- Gausa, Louis, Westinghouse Electric Company
- Girouard, Martin, Framatome
- Guzman, Michael, Jacobs Technology

**H**

- Hallatt, Bryan J., Great Lakes Nuclear Services (Canada)

- Halley, Matthew N., U.S. Army
- Harvey, Sam, Electric Power Research Institute
- Helleux, Georges, Thermocoax (France)

**J**

- Jackson, Colt, Y-12 National Security Complex
- Jarrett, Ronald A., Tennessee Valley Authority
- Jensen, Peter, Zachry Nuclear Engineering
- Joe, Mickey D., Entergy

**K**

- Kim, Jonghyun, Chosun University (South Korea)
- Kokan, Timothy, Aerojet Rocketdyne
- Koo, Young Do, Chosun University (South Korea)
- Kosman, Michael, Curtiss-Wright

**L**

- Lahti, Erik A.
- Lane, Carol S., X-energy
- Latimer, Susanne, Bruce Power
- Lee, Seung Jun, Ulsan National Institute of Science and Technology (South Korea)
- Lee, Sunghoon, Chosun University (South Korea)
- Lew, Roger, University of Idaho
- Li, Qizhen, Washington State University
- Liu, Bei, Excelsior College
- Lonsberry, Michael, Energy Steel
- Lu, Baofu, TerraPower
- Lubeski, Paul A., National Technical Systems

*Continued*



**M**

Mallett, Bruce S., Mallett Consulting Services  
 Martin, Jose M., Tecnatom USA  
 Martin, William J., Sandia National Laboratories  
 Mason, Trey, Westinghouse Electric Company  
 Massone, Mattia, Karlsruhe Institute of Technology (Germany)  
 Matthews, James S., IV, U.S. Army  
 Maxwell, James L., La Trobe University (Australia)  
 McCormick, Mary, Baltimore City Community College  
 McDonald, Michael J., Exelon Generation  
 McFarland, David M., U.S. Navy  
 McInteer, William A., BWXT Nuclear Operations Group  
 McLerran, John, NuScale Power  
 McManis, Joe  
 Miko, David K., Los Alamos National Laboratory  
 Millspaw, Samuel, Paragon Energy Solutions  
 Mitkova, Maria, Boise State University  
 Moran, Kate, Battelle  
 Muhlheim, Michael D., Oak Ridge National Laboratory  
 Myloradowycz, Victor, Power & Energy

**N**

Nastasi, Michael, University of Nebraska–Lincoln  
 Naughton, Tyler, University of Tennessee–Knoxville  
 Nyamweya, Linnet K., Kenya Nuclear Electricity Board

**O**

Ohmstede, Gary, Southern Nuclear

**P**

Pannell, George L., George Pannell Consulting  
 Perryman, Richard L., Southern Nuclear  
 Polich, Richard A., GDS Associates  
 Primer, Craig, Idaho National Laboratory  
 Prochko, Steven K., Battelle Energy Alliance

**R**

Reynolds, Britton, Aerojet Rocketdyne  
 Ronquillo, Matthew, recent graduate  
 Rucker, Angela M., Duke Energy

**S**

Sarrasin, Shawn, Xcel Energy  
 Schoonen, David J., Battelle Energy Alliance  
 Schukei, Nathan, Emerson  
 Seifert, Hans-Peter, Paul Scherrer Institut (Switzerland)  
 Selby, Aaron, Ultra Safe Nuclear Corporation  
 Selig, Edward, Texas Energy Research Associates  
 Selwaeh, Alex, North Carolina State University  
 Shastry, Shambhu K., Excelsior College  
 Shaw, Paul Brad, Leak Testing Specialists  
 Sheu, Rong-Jiun, National Tsing Hua University (China)  
 Smith, April, U.S. Nuclear Regulatory Commission  
 Soneda, Hideo, Hitachi-GE Nuclear Energy (Japan)

Spence, Richard E., Resource Management Group  
 Steh, Wesley, Entergy Services

**T**

Tarango, Heather M., PG&E  
 Taylor, Brice, Naval Nuclear Laboratory  
 Thalasinis, Brent, T&T Enterprises  
 Thayer, Dean, consultant  
 Thompson, Robert A., MFP Creative  
 Torres, Peter, Exelon  
 Tucek, Kamil, European Commission Joint Research Centre (Netherlands)  
 Tyler, Richard E., Exelon

**V**

Vanderslice, Steven R., PSStech  
 Vaughan, Steven, Southern California Edison/San Onofre  
 Visker, James, Maxeta Technologies  
 Vitali, Juan, U.S. Army

**W**

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