# **SANS** Winter Meeting & Expo

November 30 – December 3, 2021 | Washington Hilton | Washington, D.C.

# Honors and Awards Recipients

**Embedded Topical Meetings** 

Decommissioning Environmental Science and Remote Technology 2021 November 30 – December 3

14th International Topical Meeting on Nuclear Applications of Accelerators

November 30 – December 4



## **ANS Opening Plenary Session Awards**

Wednesday, December 1, 2021 8:00–10:30AM

#### Presentation Of Awards

Dr. H.M. Hashemian Honors and Awards Committee Chair



## **Award Recipients**

ANS Fellow Inductions Dwight D. Eisenhower Medal Seaborg Medal Alvin M. Weinberg Medal E. Gail de Planque Medal Mary Jane Oestmann Professional Women's Achievement Award Reactor Technology Award Landis Public Communication and Education Award Young Members Advancement Award (YMG) Young Member Excellence Award (YMG)

## **Division Acronyms**

ETWDD - Education, Training and Workforce Development Division FED - Fusion Energy Division NISD - Nuclear Installations Safety Division IRD - Isotopes and Radiation Division RPD - Reactor Physics Division RRSD - Robotics & Remote Systems Division THD - Thermal Hydraulics Division YMG - Young Members Group

## Opening Plenary Session Awards ANS Fellows



Presented to: Mr. Jeffrey L. Bradfute, PE, MBA Westinghouse Electric Co. LLC

In recognition for his impactful leadership and successful execution of major nuclear industry programs which have brought to the development and deployment of robust, leak-free, advanced fuel products and engineering services that drove the nuclear industry to achieve the highest standards in fuel operational, safety and economic performance.



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Presented to:
Dr. Alex R. Burkart, PE
U.S. Department of State (Retired)
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In recognition for his exceptional contributions on behalf of the United States to the effective and reliable use of nuclear energy around the world, in particular in emerging countries, and his untiring efforts to assure the highest standards of safety, security and nonproliferation.



Presented to: Prof. Igor Jovanovic University of Michigan

In recognition for his pioneering contributions in the field of intense laser science and technology, enabling novel applications in nuclear photonics and spectroscopy of nuclear materials; for innovative radiation detection research in support of nonproliferation; and for outstanding teaching and student mentorship in the discipline of nuclear science and engineering.

## Opening Plenary Session Awards ANS Fellows



Presented to: Dr. Jean C. Ragusa Texas A&M University

In recognition for his seminal contributions to the field of high-performance scientific computing applied to nuclear energy and national security. His accomplishments include the development novel numerical methods for accelerating transport solutions on supercomputers, discretization techniques for improved physical accuracy in radiation transport and multiphysics simulations, and applied data science.



Presented to: Dr. Xiaodong Sun University of Michigan

In recognition for his significant contributions to research in two-phase flow and heat transfer, interfacial area transport modeling and experimentation, thermal-hydraulic phenomena in advanced reactors, and high-temperature compact heat exchangers to improve modeling capabilities and support reactor development, and those as an educator and mentor of nuclear engineering students and researchers.

## **Opening Plenary Session Awards** Seaborg Medal



Presented to: Dr. John C. Browne Los Alamos National Laboratory (Retired)

In recognition of a career of contribution to research, institutional management and stewardship, and to the selection and development of scientists and engineers.

## Dwight D. Eisenhower Medal



Presented to: Dr. Ernest J. Moniz Nuclear Threat Initiative

For his leadership in promoting the development of clean energy sources and in reducing the worldwide radiological threat through global nonproliferation efforts.

## Alvin M. Weinberg Medal



Presented to: Dr. Kenneth L. Peddicord, PE Texas A&M University

For nearly 50 years, of contributions to major advances in nuclear technology and education, while providing innovative international experiences to students.

## Opening Plenary Session Awards E. Gail de Planque Medal



Presented to: Prof. Sara A. Pozzi University of Michigan

In recognition for her sustained, significant scientific contributions to the nuclear nonproliferation and security through a combination of detection system advancement and multi-institutional leadership.

## Mary Jane Oestmann Professional Women's Achievement Awards



Presented to: Dr. Madeline A. Feltus U.S. Department of Energy, Office of Nuclear Energy

In recognition for her outstanding personal dedication, leadership, and technical achievements in the fields of nuclear science, engineering, research, and education.



Presented to: Prof. Raluca O. Scarlat University of California at Berkeley

In recognition for her technical leadership in advancing the knowledge base of high-temperature molten salts and their application to advanced nuclear reactors, and developing molten salt reactor curriculum.

## Opening Plenary Session Awards Reactor Technology Award



Presented to: Prof. Mohamed S. El-Genk University of New Mexico

In recognition of extraordinary contributions towards advancing space and micro reactor technologies.

## Social Responsibility in the Nuclear Community Award



Presented to: The Tennessee-85 students and the Secretary of Energy

In recognition of the outstanding leadership provided by 85 brave young Tennessee students and the US Department of Energy (then the Atomic Energy Commission) in desegregating the first public school system in the Southeastern United States back in 1955.

### Landis Public Communication & Education Award



Presented to:

Dr. Joshua L. Vajda, PE, CHP Amentum Technical Services, LLC.

For exemplary outreach efforts domestically and internationally, to increase public understanding of nuclear careers and to promote the importance of professional licensure.

## **Opening Plenary Session Awards**

### Landis Public Communication & Education Award



Presented to:

Mr. Michael W. McCracken Southern Nuclear Operating Company

In recognition of exhibiting outstanding communication skills and an exceptional ability to inform teachers, K-12 students and other audiences about nuclear science and technology careers and applications.

## Young Members Advancement Award (YMG)



Presented to: Mr. Benjamin Holtzman Nuclear Energy Institute

For service and commitment to Young Members everywhere.

## Young Member Excellence Award (YMG)



Presented to: Mr. Harsh S. Desai Zeno Power Systems

For advancing the goals of the Young Members Group through exceptional leadership and remarkable contributions to the Society.



## **ANS President's Special Session Awards**

Thursday, December 2, 2021 8:00–10:30AM

**Presentation Of Awards** Steven P. Nesbit ANS President



## AWARD RECIPIENTS

Presential Citations Milton Levenson Distinguished Service Award Darlene Schmidt Science News Award

## ANS President's Special Session Awards Presential Citations



Presented to: Belgian Nuclear Society

For 50 years of continuous excellence in the field of nuclear science and technology leading to international recognition for research and development, operational performance, and industrialization of advanced nuclear technologies.



#### Presented to: Mr. Paul T. Dickman Argonne National Laboratory

For his sustained and significant contributions to the American Nuclear Society and the nuclear technology field in the area of public policy, and the leadership he provided to the Public Policy Committee, Congressional Affairs Committee, and the External Affairs Committee.



Presented to: Dr. Mark T. Peters Battelle Memorial Institute

For his leadership in the development and publication of "The U.S. Nuclear R&D Imperative," an essential and enduring resource for ANS public policy work.

## ANS President's Special Session Awards Presential Citations



Presented to: Dr. Christina A. Back General Atomics

For her leadership in the development and publication of "The U.S. Nuclear R&D Imperative," an essential and enduring resource for ANS public policy work.



Presented to: Ms. Carol L. Berrigan Nuclear Energy Institute

For ably and effectively carrying out the role of nuclear industry ambassador to government agencies, nongovernmental organizations, and external groups, and for her sustained service to the American Nuclear Society.



Presented to:

Mr. Daniel L. Churchman Southern Nuclear Operating Company

For his sustained and significant contributions to the success of the Utility Working Conference, a flagship ANS meeting and an essential venue for information exchange, cooperation, training and mentoring for nuclear professionals in the field of power production.

## ANS President's Special Session Awards Presential Citations



Presented to: Mr. Daniel J. Doran Exelon Generation Co., LLC

For his sustained and significant contributions to the success of the Utility Working Conference, a flagship ANS meeting and an essential venue for information exchange, cooperation, training and mentoring for nuclear professionals in the field of power production.



Presented to: Mr. James (Vince) V. Gilbert Model Performance, LLC

For his sustained and significant contributions to the success of the Utility Working Conference, a flagship ANS meeting and an essential venue for information exchange, cooperation, training and mentoring for nuclear professionals in the field of power production.

## ANS President's Special Session Awards Milton Levenson Distinguished Service Award



Presented to: Mr. Robert F. Penn, Jr. Los Alamos National Laboratory

For his untiring and continued support for the mission of nuclear energy for over 45 years of ANS involvement as a leader, an advisor, a hard-worker, a friend, and a visionary.

## **Darlene Schmidt Science News Award**



Presented to:

Ms. Caroline Delbert Freelance Writer/Reporter Popular Mechanics

For her growing coverage of all things nuclear science and technology with a focus on advanced reactor designs, fusion energy, nuclear space technology, and non-energy applications of nuclear technology and radiation. Delbert's writing explains nuclear technology concepts and developments in clear language to the general public.

### **Awards Presented Elsewhere**

## **Nuclear Historic Landmark**

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#### Presented to: USS Enterprise (CVN-65), Aircraft Carrier

In recognition of the most advanced nuclear engineering technology of the 1950s and for her 51 years of service to our Nation, the USS Enterprise (CVN-65) is designated as an ANS Nuclear Historic Landmark.

## **Committee Awards**

### **Standards Service Award**



Presented to: Dr. Stanley H. Levinson, PE Independent Consultant

In recognition of outstanding service to the American Nuclear Society in providing exemplary leadership for more than two decades in establishing sound and universally accepted standards for probabilistic risk assessment, and for notable contributions to the broader effort of introducing risk-informed and performance-based concepts into ANS standards.

### Glenn T. Seaborg Congressional Science and Engineering Fellowship



Presented to: Mr. Matthew J. Marzano Exelon Generation

2022 Congressional Fellow

## **Committee Awards**

## Local Section Meritorious Awards (ETWDD & LSC)

The Local Section Meritorious Award is presented to the ANS local sections that have conducted the most worthwhile events; have shown outstanding membership growth, participation, and administration during the award year.

This year's recipients are:

- Northeastern Section (Best Recruiting Program)
- Savannah River Section (Best Meetings and Programs)
- Idaho Section (Best Public Information and Education)
- Idaho Section (Best Local Section Management)
- Idaho Section (Best Overall Meritorious Local Section)

## Samuel Glasstone Awards (ETWDD & SSC)

The Samuel Glasstone Award recognizes outstanding ANS Student Sections.

This year's recipients are:

- University of Puerto Rico at Mayagüez (Best Section)
- University of Illinois, Urbana Champaign (Second Place)
- University of New Mexico (Third Place)
- Oregon State University (Honorable Mention)

## **Division Awards**

## Mark Mills Awards (ETWDD)



Presented to: Dr. Dylan S. Hoagland & Dr. Raffi A. Yessayan North Carolina State University

For their work entitled: "Solution of the Neutron Transport Equation on Unstructured Grids Using the Parallel Block Jacobi-Integral Transport Matrix Method via the Novel Green's Function ITMM Construction Algorithm on Massively Parallel Computer Systems."



Presented to: Dr. Yan-Ru Lin University of Tennessee

For his work entitled: "Temperature-dependent cavity swelling in dual-ion irradiated Fe and Fe-Cr ferritic alloys."

## Robert L. Long Training Excellence Award (ETWDD)



Presented to: Mr. Lawrence E. Boing Argonne National Laboratory

In recognition of 41 years of experience in nuclear facility decommissioning. Since 1997 he organized and directed decommissioning training courses nationally and internationally - for numerous D&D staff and regulators.

## Student Design Competition (ETWDD)

The following are the finalists in the undergraduate category (in no particular order):

#### A Modular Molten Salt Reactor for Desalination

Texas A&M University Authors: Sebastian Tchakerian, Phillip Olivarez, Robert Kollman David Swindall, and David Nguyen Advisors: Mauricio Eduardo Tano Retamales and Karen Vierow Kirkland

## **Micro-HTGR for Military Installations**

University of Florida Authors: Cindy Marie McCabe, Jonathan Simoes Arnaud, Cesar Arturo Pozas, Steven Lester, and Micah Troyer Advisor: DuWayne Schubring

## Production of Carbon-14 Radioisotope using an Aluminum Nitride Target in HFIR

University of Tennessee - Knoxville Authors: Austin Welsh, Christopher Busch, Kayla Noelle Sims, and Madison Kathryn Tippet Advisor: Jason Hayward

### Graduate category finalist:

## Design of a Low Enrichment Uranium Nuclear Reactor to Power a Future Martian Colony

Colorado School of Mines Authors: Jacob Tellez, Joffrey Dorville, Conner Glatt, and Jeffrey C. King Advisor: Jeffrey C. King

## Edward Teller Awards (FED)



#### Presented to:

Dr. Omar A. Hurricane Lawrence Livermore National Laboratory

For visionary scientific insights and leadership of NIF experiments resulting in the achievement of fuel gain, an alpha-heating-dominated plasma, and a burning plasma.



Presented to: Prof. Ryosuke Kodama Osaka University

For pioneering studies at the frontier of Fast Ignition research for laser fusion science and exploring high energy density science.

## Radiation Science & Technology Award (IRD)



#### Presented to:

Dr. Anna S. Erickson Georgia Institute of Technology

For establishing the foundation for antineutrino detection for reactor power monitoring and nuclear fuel burn-up measurements.

## Theos J. "Tommy" Thompson Award (NISD)



Presented to: Mr. Karl N. Fleming KNF Consulting Services LLC

For major contributions to PRA methods and their application to nuclear reactors, especially including analyzing common cause failures, multi-unit PRA, and PRA for advanced non-LWRs.

## Eugene P. Wigner Reactor Physicist Award (RPD)



#### Presented to:

Prof. Imre Pázsit Chalmers University of Technology

For his contributions to the theory of random processes in nuclear reactors and the development of practical on-line methods for diagnostic techniques to detect incipient faults. In addition, methods to detect illicit nuclear materials.

## Ray Goertz Award (RRSD)



Presented to:

Dr. Mark W. Noakes Oak Ridge National Laboratory

In recognition of outstanding contributions to the field of robotics and remote systems technology and service to the ANS Robotics and Remote Systems Division.

## Bal-Raj Sehgal Memorial Award (THD)



Presented to: Dr. Elia Merzari Pennsylvania State University

In recognition of his outstanding contributions to the simulation of complex turbulent flow phenomena in nuclear reactors which help enhance the safety and efficiency of advanced reactor designs and for his tireless support of ANS technical committees and conferences. Will be presented at the 19th International Topical Meeting on Nuclear Reactor Thermal Hydraulics (NURETH-19).

## **Technical Achievement Awards (THD)**



Presented to: Dr. Francesco D'Auria University of Pisa

For his exceptional contributions to the understanding of fundamental thermalhydraulics phenomena in light water reactors and his pioneering contributions to the development of best estimate approaches that account for uncertainty.



Presented to:

Dr. Chul-Hwa Song Korea Atomic Energy Research Institute

For his outstanding contributions to the advancement of nuclear thermalhydraulics and reactor safety through experiments and physical modeling of key phenomena in conventional and advanced light water reactors.