# ANS Virtual Annual Meeting 2021



# Honors and Awards Recipients



### Plenary Session/Keynote Panel Awards

Monday, June 14, 2021 10:00 am–12:30 pm (EDT)



### **AWARD RECIPIENTS**

**Presentation of Awards:** Hash Hashemian, Honors and Awards Committee Chair

**ANS Fellow Awards** 

Walter H. Zinn Medal

Landis Young Member Engineering Achievement Award

**Mishima Award** 

Special Award for Making Advanced Nuclear Energy Systems a Reality: Going Beyond Promotion Toward Deployment



Presented to: Mr. Bradley J. Adams Southern Nuclear Operating Company

In recognition of his outstanding technical leadership in nuclear engineering and plant operations. As Vice President of Engineering at Southern Nuclear, his hard work and vision have produced significant contributions to both nuclear operations and construction. He has become a major industry leader in guiding and addressing the most critical issues facing the long-term health and success of the entire US nuclear fleet.



Presented to: Dr. William E. Burchill Texas A&M University

In recognition of developing one of the earliest complete analyses of the thermal-hydraulic phenomena during the Three Mile Island Unit 2 accident. He improved the models for nuclear power system performance and accident simulation. He upgraded Probabilistic Risk Analysis tools and introduced significant improvements in the application of risk-informed licensing practices.



Presented to: Dr. Mark B. Chadwick Los Alamos National Laboratory

In recognition for his leadership in the U.S. of nuclear cross section evaluations leading to improved simulation performance across the range of nuclear applications; renowned contributions to modeling of plutonium fission; international leadership in nuclear science and technology; and substantial and enduring individual technical contributions to the nuclear enterprise.



Presented to: Dr. Stuart A. Maloy, PhD Los Alamos National Laboratory

In recognition for his outstanding accomplishments and leadership in radiation materials science and engineering. His expertise in microstructural analysis and interpretation of atomic-scale defects on changes to macroscopic-scale properties of metals underpins the development of innovative materials needed for spallation neutron sources, advanced fission and fusion reactors, and other energy applications.



Presented to: Dr. Robert P. Martin BWX Technologies, Inc.

In recognition for his sustained and significant technical contributions to the state-of-the art research in modeling nuclear power plant behavior during design basis and beyond design basis accident scenarios that made it possible to increase efficiencies and power levels at operating nuclear power plants.



Presented to: Dr. Kathryn Ann McCarthy Oak Ridge National Laboratory

In recognition for her outstanding leadership, both nationally and internationally, leading to the advancement of fission reactor systems and fusion technologies.



Presented to: Dr. Todd S. Palmer Oregon State University

In recognition for his sustained contributions to the advancement of methods and algorithms for computational radiation transport impacting critical software assets at the NNSA and nuclear energy national laboratories, and their innovative application in the analysis of high energy density and reactor physics systems.



Presented to: Dr. Monica C. Regalbuto Idaho National Laboratory

In recognition of her exceptional contributions to the nuclear fuel cycle and nuclear waste management mission by developing and demonstrating innovative nuclear energy technologies that have significantly advanced the scientific, engineering, policy, and regulatory aspects of the nuclear enterprise.

### Walter H. Zinn Medal



Presented to: Dr. Jose N. Reyes, Jr. NuScale Power

In recognition of revolutionizing 21st century nuclear power with the design of an innovative passively-cooled, USNRC-licensed small modular reactor and by co-founding NuScale Power.

### Landis Young Member Engineering Achievement Awards



Presented to: Prof. Nicholas R. Brown University of Tennessee, Knoxville

In recognition of his technical leadership in advancing the safety case for accident tolerant fuel and cladding and in paving the way for licensing of advanced nuclear reactors.



Presented to: Dr. Paul K. Romano Argonne National Laboratory

In recognition of his leadership in advancing the state of the art and breadth of impact of computational nuclear engineering.

### Mishima Award



Presented to: Prof. Robin W. Grimes Imperial College London

In recognition for his seminal contributions applying atomistic simulation techniques to predict governing phenomena in nuclear materials including fuel performance and the radiation tolerance of ceramic waste forms.

### Special Award for *Making Advanced Nuclear Energy Systems a Reality: Going Beyond Promotion Toward Deployment*



Presented to:

Dr. D. V. Rao Los Alamos National Laboratory

In recognition of advancing small reactor deployment opportunities by designing new space reactors, microreactors, and moderating material for low instead of high enriched uranium fuel.



### **President's Special Session**

Tuesday, June 15, 2021 10:00 am–11:30 am (EDT)



### **AWARD RECIPIENTS**

**Presentation of Award:** Mary Lou Dunzik-Gougar ANS President

**Presidential Citations** 

Leadership Award

### **Presidential Citations**



#### Presented to: Michael L. Corradini, PE University of Wisconsin Madison

For over ten years of dedicated leadership and service as an associate editor (2008– present) and as technical editor (2019–2020) at a critical juncture for Nuclear Science and Engineering, a peer-reviewed journal of the American Nuclear Society.



#### Presented to:

Alyse S. Huffman U.S. House of Representatives Committee on Science, Space and Technology

For her leadership in getting the Energy Act of 2020 passed and signed into law.



#### Presented to:

#### Deborah Ann Hill National Nuclear Laboratory

For her leadership in fulfilling the expanded mission of the Professional Divisions Committee as set forth in Change Plan 2020. She has brought diverse Division leadership together to effectively identify and collectively solve problems, to share information and ideas, and to expand lines of communication among Divisions, the Executive Committee and the Board of Directors.

### Leadership Awards



Presented to: Dr. Steven A. Arndt Oak Ridge National Laboratory

In recognition for his exemplary leadership and lifelong dedication to efforts that advanced a wide range of technical and policy initiatives improving nuclear safety standards across the industry.



Presented to: Mr. Harsh S. Desai Nuclear Energy Institute

In recognition for his outstanding leadership and extraordinary contributions to the American Nuclear Society.

### AWARDS PRESENTED ELSEWHERE Outgoing President Appreciation



Presented to: Mary Lou Dunzik-Gougar President, American Nuclear Society 2020 - 2021

For outstanding leadership and dedication during her term as President of the American Nuclear Society (ANS). During her term, Mary Lou Dunzik-Gougar led ANS through unprecedented challenges as the Covid-19 pandemic upended "normal." She worked tirelessly through the new virtual world to keep the ANS membership involved and engaged in their professional society. She advocated effectively for the value of nuclear technology – "Nuclear is good for you!" - while challenging the Society to consider ideas and perspectives outside the mainstream. For this and other contributions to ANS and the nuclear community it represents we thank Mary Lou Dunzik-Gougar for her service.

### Henry DeWolf Smyth Nuclear Statesman Award



Presented to: Ms. Kristine L. Svinicki U.S Nuclear Regulatory Commission

In recognition of three decades of leadership and service in meeting the clean energy needs of the global community.

Presented by ANS President Mary Lou Dunzik-Gougar during NEI's Nuclear Energy Assembly in June 2021

### **DIVISION-ADMINISTERED AWARDS**

### 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.

# Early Career Reactor Physicist Award (RPD)



Presented to: Dr. Benjamin R. Betzler Oak Ridge National Laboratory

For excellence and leadership in applied reactor physics research and development for advanced reactor designs.

### Young Member's Research Achievement Award (MCD)



Presented to:

Dr. Steven P. Hamilton Oak Ridge National Laboratory

In recognition of his significant contributions to mathematics and computation in nuclear engineering which are the development of novel transport algorithms and linear and non-linear solvers that have enabled the use of next-generation GPU architectures for production-level, Monte Carlo and deterministic neutronics simulations on HPC systems.

### **FCWMD Lifetime Achievement Award**



Presented to:

Dr. Terry Todd Idaho National Laboratory

In recognition of 38 years of demonstrated leadership in chemical separations research in support of nuclear fuel recycle technologies and radioactive waste treatment.

### **FCWMD** Distinguished Service Award



Presented to: Mr. Jack D. Law Idaho National Laboratory

For his unwavering support of FCWMD, including his efforts to support ANS students and early-career researchers in fuel cycle and waste management.

### **Don Miller Award (HFICD)**



Presented to: Dr. Ronald L. Boring Idaho National Laboratory

In recognition for his outstanding contributions to the nuclear industry's human factors community, especially in the areas of human reliability analysis, system design and evaluation.



Presented to: Dr. Rizwan Uddin University of Illinois at Urbana-Champaigne

In recognition for his leadership in technical training, effective control room and operations design, human factors research, and developing 3-D interactive "environments" for student learning.

### H.M. Hashemian Mid-Career Award (HFICD)



Presented to: Dr. Sacit M. Cetiner Idaho National Laboratory & Massachusetts Institute of Technology

In recognition of his outstanding technical contributions to the field of measurement science including instrumentation, control, and data science.

### Ted Quinn Early Career Award (HFICD)



Presented to: Dr. Fan Zhang University of Tennessee, Knoxville

In recognition for her contributions to the research and development community for nuclear science and technology with emphasis on instrumentation and control and cyber security requirements and controls.

# Arthur Holly Compton Award in Education (ETWDD)



Presented to:

Dr. Robert D. Busch University of New Mexico

In recognition for academic excellence in nuclear engineering education and exemplary service in national educational activities supporting professional engineering licensure.



Presented to: Dr. Nolan E. Hertel Georgia Institute of Technology

In recognition for outstanding contributions to education in the field of nuclear engineering in the spirit of Arthur Holly Compton - a scientist, teacher, and national leader.

### David Okrent Award for Nuclear Safety (NISD)



Presented to: Dr. Katrina M. Groth University of Maryland

For leading technical contributions to nuclear safety and service to the community through teaching, conference organization, and ANS committee work.



Presented to: Dr. Matthew R. Denman Kairos Power, LLC

For excellent contributions to and leadership in the development of probabilistic risk assessment standards and mechanistic source term technology for existing and advanced reactors.

### American Nuclear Society Scholarship Award Recipients

ANS's Scholarship Program demonstrates our commitment to educating future professionals. The scholarships recognize the academic excellence of graduate and undergraduate students studying in a nuclear field for the 2021-2022 academic year. This year, ANS awarded \$157,000 in scholarships to 59 recipients. This is possible largely due to generous donations from ANS members, Professional Divisions, individuals, and the commitment of the ANS Board of Directors.

### •UNDERGRADUATE CATEGORY• ANS Incoming Freshman

Tucker H. Bundy - Idabel High School (OK) Sarah E. Cole - Mountain View High School (ID) Rory M. Coll - Leonardtown High School (MD) Alexander T. Edwards - Bob Jones High School (AL) Carly E. Evans - Walled Lake Northern (MI) Jonathan Liu - Saint Joseph High School (IN) Lane M. Scheel - Palmyra-Eagle High School (WI) Michael Shiwbaran - Central Park East High School (NY) Jasmine C. Walker - Copley High School (OH) Gabriel W. Watson - Anderson County High School (TN)

#### ANS Undergraduate (Sophomore)

William A. Graham - North Carolina State University

#### ANS Undergraduate (Junior/Senior)

Christian A. Arguello - University of New Mexico Hayden S. Bland - North Carolina State University Anthony G. Bowers - University of Massachusetts Lowell Grayson S. Gall - North Carolina State University Jacob M. Halpern - Purdue University Tyler J. Lewis - Purdue University Charles McSwain - University of Tennessee, Knoxville Robert H. Mendleski - Texas A&M University Mitchell L. Mika - University of Florida Kogan L. Powell - Utah State University Anthony F. Tom - University of Tennessee - Knoxville

#### Angelo F. Bisesti Memorial Scholarship

Noah M. Higgins - North Carolina State University

#### Raymond DiSalvo Memorial Scholarship

Alisa K. Machiwalla - Kennesaw State University

#### William R. & Mila Kimel Nuclear Engineering Scholarship

Jack W. Fletcher - Missouri University of Science and Technology

Laura J. Shi - University of California, Berkeley

#### John R. Lamarsh Memorial Scholarship

Kaylee M. Cunningham - University of Florida Abigail M. Davis - North Carolina State University

#### Hans P. Loewen Memorial Scholarship

Sophia L. Morton - Oregon State University

#### Accelerator Applications Division Scholarship

Noah M. Higgins - North Carolina State University

#### Joseph Naser HFICD Undergraduate Scholarship

Shana L. Johnson - North Carolina State University

#### Operations and Power Division Scholarship

Benjamin M. McNeely - University of Massachusetts Lowell Katy J. Worrell - University of Tennessee, Knoxville

#### Fusion Energy Division Dr. Kenneth R. Schultz Undergraduate Scholarship

Joshua M. Hoffman - University of Illinois Urbana-Champaign

Broderick M. Sieh - Kansas State University (Honorable Mention)

#### Rudy Stamm'ler Undergraduate Reactor Physics Scholarship

Timothy M. Kiefer - North Carolina State University

#### •GRADUATE CATEGORY• ANS Graduate

Eli J. Boland - Missouri University of Science & Technology Adam Darr - Purdue University, West Lafayette Ahmed Moustafa - North Carolina State University Kathryn A. Mummah - University of Wisconsin-Madison Rittu S. Raju - The University of Michigan Ashley R. Raster - Missouri University of Science and Technology Ghada Shkoukani Alqous - North Carolina State University Sarah R. Stevenson - University of California, Berkeley Samuel O. Webster - North Carolina State University Paige K. Witter - Colorado State University

#### Everitt P. Blizard Graduate Scholarship

Madeline L. Lockhart - North Carolina State University

Robert A. Dannels Memorial Scholarship Emily H. Vu - University of Michigan, Ann Arbor

Decommissioning & Environmental Sciences Division Graduate Scholarship Abdulsalaml Shakhatreh - Virginia Tech

Ely M. Gelbard Graduate Scholarship Hadyn Kistle - Texas A&M University

#### Alan F. Henry/Paul A. Greebler Memorial Scholarship

William C. Dawn - North Carolina State University Gavin K. Ridley - Massachusetts Institute of Technology

#### Lawrence E. Hochreiter Graduate Scholarship

Adam Kraus - Pennsylvania State University

Saul Levine Memorial Scholarship Katelyn C. Cook, Rensselaer Polytechnic Institute

#### Michael J. Lineberry Graduate Scholarship

Kaelee A. Novich - Boise State University

Nuclear Criticality Safety Pioneers Scholarship Kristin N. Stolte - Texas A&M University

Fuel Cycle & Waste Management Division John D. Randall Scholarship

Hannah K. Patenaude, University of Nevada, Las Vegas

James F. Schumar Scholarship Lorenzo Vergari - University of California, Berkeley

#### Robert E. Uhrig Graduate Scholarship Vincent P. Paglioni - University of Maryland. College Park

Vogt Radiochemistry Scholarship

Madison N. Allen - University of Tennessee Knoxville

#### NEED Scholarships John and Muriel Landis Scholarships

Madison N. Allen - University of Tennessee Knoxville Madison N. Bushloper - University of Florida Alexander S. Hauck - Rensselaer Polytechnic Institute Miriam A. Kreher - Massachusetts Institute of Technology Ryan P. McGuire - Virginia Commonwealth University Gibson D. Prall - University of New Mexico Sierra A. Tutwiler - Virginia Commonwealth University

#### Nontraditional Student Scholarship

Teyen Widdicombe - University of Idaho

#### Community College/Trade School Scholarship

#### Kent Hamlin Memorial Scholarship

Michael J. Bircher - Columbia Basin College Thomas C. Oberhausen - Lakeland Community College

#### Local Section Scholarships

#### ANS Oak Ridge / Knoxville Local Section Undergraduate Scholarship

Madison N. Allen - University of Tennessee Knoxville

#### ANS Oak Ridge / Knoxville Local Section Graduate Scholarship

Madison S. Ratner - University of Tennessee - Knoxville

#### Pittsburgh Local Section Graduate Scholarship Miriam A. Kreher - Massachusetts Institute of Technology

#### Pittsburgh Local Section Undergraduate Scholarship

Veronica Heyl - North Carolina State University

#### Washington, DC Local Section Jeffrey A. Gorman Undergraduate Scholarship

Joshua M. Hoffman - University of Illinois Urbana-Champaign

#### Washington DC Local Section George P. Shultz and James W. Behrens Graduate Scholarship

Arturo Cabral - Virginia Commonwealth University William Searight - Pennsylvania State University

#### Washington Internships for Students of Engineering (WISE) ANS Sponsored Interns

Zachary T. Deziel - NASA Robert Brent Renfrow - Lipscomb University

### Alpha Nu Sigma National Honor Society



The Alpha Nu Sigma National Honor Society, established by the American Nuclear Society's Education, Training and Workforce Development Division, recognizes high scholarship, integrity, and potential achievement among outstanding degree-seeking nuclear engineering students at institutions of higher learning. The following individuals have been inducted into the Alpha Nu Sigma National Honor Society in 2021:

#### Massachusetts Institute of Technology

Ali Aljefri Zoe Lilah Fisher Justin Kunimune Lige Liu Zhuo Liu Thanh Nguyen Gavin Ridley William Robb Stewart Ralph S. Wiser Yuan Zhu

#### Rensselaer Polytechnic Institute

Casey Henry Burton Qiyun Cheng Lauren Elizabeth King Dante Mariano Mancinelli

#### The Ohio State University

Pearle M. Lipinski Tomás Mallmann Paganin Tyler Jake Osterhout Corbin Winningham

#### United States Military Academy (West Point)

Cameron James Barlow Vincent Alexander Gasparri Enrique Ignacio Gonzalez Joseph Wesley Maddock Amanda Leigh McDonough Luke Edward Sanders Valentina Marie Vincent

#### United States Naval Academy

Alexander I. Carter Elizabeth Farnan Nicholas Kennedy Young-Uk Kim Luke Leopold Lhota Katelyn Majors Nathan Joseph Matalavage Calvin H. Mcdonald Miss Madeline Isabella Prince

University of Illinois at Urbana-Champaign Sari Alkhatib Katarzyna Borowiec Michael Chakinis Nicholas Arthur Dailev Miss Jasmine Dinari Moutaz Elias, PE Roberto Fairhurst Agosta Joshua Michael Hoffman Ibrahim Jarrah Alvin Joon Hon Lee Nikhil Patel Carly J. Romnes Yangin Zhai Taiyang Zhang

#### **University of Michigan**

Damon Anderson Miss Kaitlyn Elizabeth Barr Adam Nathaniel Brusstar Yucan Ding Miss Marisol Garrouste Juliane Kinney Joshua Lathum Aaron Thomas Arlyn MacDonald Rowan Marchie Jordan David Noey Braden Jake Balsley Saltus Christopher Dylan Thomas Leo Tunkle

#### **University of New Mexico**

Saleh Afif Alafifi Ragai Altamimi Christian Alexander Arguello Luke Baca Malak Bani-Melhem Kyle S. Beling Dalton Irvin Abhishek KC Matthew J. Lazaric Jennifer Leute Dominic Lioce Alexis Maldonado Bobbi Merryman Melissa Andrea Moreno Jawad Ribhi Moussa Benjamin Roy Murphy Mekiel Olguin Tara Lee Robertson Gregory Alexander Ryba Bruno Sa de La Rocque Guimaraes Asmaa Salem Steven Leif Showalter Corev M. Skinner Khaled Talaat Michael John Tanguay Daniel H. Timmons Jeremy Vaughan Dvlan A. Weatherred Colin Andrew Weaver Christopher Wolfe

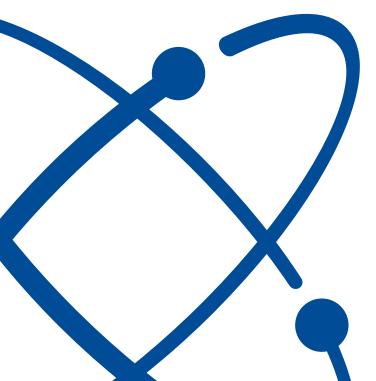
#### University of Tennessee

Promise Adebayo-Ige Miss Annie McKenzie Berens David Burgess Sarah Creasman Ethan Deters Maj. Robert Boone Gilbreath, BSME, MS Mrs. Karen Koop Hogue Miss Katie Mae Karl Samara Michelle Levine Jana M. Starks Ryan Charles Thier

## **SANS** Virtual Annual Meeting



June 14–16, 2021 Virtual Meeting



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