



# ANS Annual Meeting

**2020**

## Honors and Awards Recipients

June 8-11, 2020  
Virtual Meeting

# Countdown to 2030

Framing the Nuclear Technology Agenda for the Next 10 Years



# American Nuclear Society

## Plenary Session/Keynote Panel Awards

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Monday, June 8, 2020  
10:00 am–11:30 am (EDT)

## AWARD RECIPIENTS

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### **Presentation of Awards:**

Hussein S. Khalil,  
Honors and Awards Committee Chair

**ANS Fellow Awards**

**Zinn Medal**

**Eisenhower Medal**

**Landis Young Member Engineering Achievement Award**

**Mishima Award**

# ANS Fellows

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*Presented to:*

**Dr. Rita Baranwal**  
**U.S. Department of Energy**

For leading the way to a new nuclear energy paradigm through visionary leadership that has spawned innovation by re-focusing the efforts of the DOE laboratory complex to advance the U.S. nuclear industry.

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*Presented to:*

**Prof. Yaron Danon**  
**Rensselaer Polytechnic Institute**

For significant contributions to nuclear engineering and science through novel experimental and analytical research leading to more accurate nuclear cross section data essential to the design of safe and reliable nuclear reactors.

# ANS Fellows

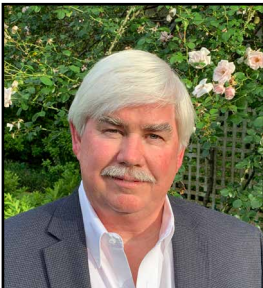
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*Presented to:*  
**Dr. Mitchell Farmer**  
**Argonne National Laboratory**

For innovative, sustained, and internationally recognized contributions addressing risk-significant severe accident issues in support of the LWR industry. His work has helped shape the thinking of the nuclear industry and regulatory bodies around the world regarding the efficacy of accident management strategies.

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*Presented to:*  
**Mr. Dennis W. Henneke**  
**GE Hitachi**

For contributions to PRAs and risk-informed applications since 1982, including risk monitors, Fire PRA, PRA standards and Multi-unit PRA, as well as for leading the development of PRAs for ABWRs and SFRs at GEH.

# ANS Fellows

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*Presented to:*

**Dr. Kostadin N. Ivanov**  
**North Carolina State University**

For sustained and internationally recognized contributions to multi-dimensional reactor physics, multi-physics methodologies and uncertainty analysis for design and safety analysis of nuclear systems.

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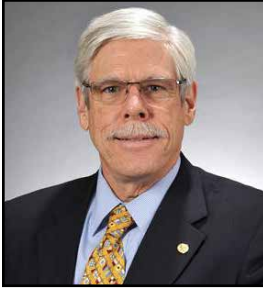
*Presented to:*

**Dr. Richard Lee**  
**U.S. Nuclear Regulatory Commission**

For sustained efforts to modernize methods for the safety analysis of power reactors including computer codes for fuel performance, neutronics and accident analysis, as well as for his contributions to international cooperation to improve the analysis of power reactors.

# ANS Fellows

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*Presented to:*

**Dr. Thomas A. Mehlhorn**  
**Mehlhorn Engineering Consulting Services**

For scientific leadership in developing predictive simulation tools, discriminating diagnostics, and validation experiments, leading to major advances in the generation and application of intense ion and electron beams and Z-pinches for nuclear fusion, nuclear science, and defense missions.

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*Presented to:*

**Dr. Juergen Rapp**  
**Oak Ridge National Laboratory**

For technical leadership in fusion plasma surface interactions, including the development of impurity seeding to mitigate fusion power exhaust, and in the development of experimental facilities for studying plasma surface interactions at Magnum-PSI (Netherlands) and proto-MPEX (USA).

# ANS Fellows

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*Presented to:*

**Prof. Kumar Sridharan**  
**University of Wisconsin Madison**

For major research contributions in materials corrosion and degradation processes in nuclear energy systems, and for impact on the nuclear industry through the development of improved fuel cladding concepts as well as education and mentorship of undergraduate and graduate students.

# Zinn Medal

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*Presented to:*

**William E. Burchill**  
**ANS Past President and Texas**  
**A&M University (retired)**

For his demonstrated ongoing leadership and mentoring of future leaders and leadership in utility, vendor and university nuclear programs, Dr. William Burchill, is nominated to be recognized as following in the footsteps of Dr. Walter Zinn and making significant contributions to the advancement of nuclear energy in the U.S. and around the world.

# Eisenhower Medal

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*Presented to:*

**Peter B. Lyons**

In recognition of Dr. Lyons' influential and prominent leadership in nuclear technology policy spanning five decades (1969-2015) and four institutions: LANL, U.S. Senate staff, the NRC, and the DOE.



# Landis Young Member Engineering Achievement Award

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*Presented to:*  
**Janelle P. Wharry**  
**Purdue University**

In recognition of her development of innovative methods for mechanical testing of materials under extreme radiation environments.

# Mishima Award

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*Presented to:*  
**Rudolph Johannes**  
**Maria (Rudy) Konings**  
**European Commission, JRC**

For numerous and pioneering achievements furthering our understanding of nuclear fuels.



# American Nuclear Society

## President's Special Session

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Tuesday, June 9, 2020  
10:00 am–11:30 am (EDT)

## AWARD RECIPIENTS

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### **Presentation of Award:**

Marilyn Kray,  
ANS President

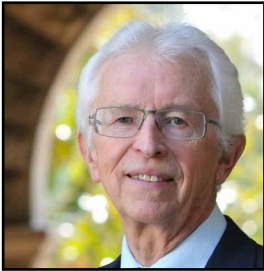
**Henry DeWolf Smyth Nuclear Statesman Award**

**Distinguished Service Award**

**Leadership Award**

# Henry DeWolf Smyth Nuclear Statesman Award

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*Presented to:*  
**Dr. Siegfried S. Hecker**  
**Stanford University**

For sustained international leadership involving nuclear technologies, including the U.S.-Russian Lab-to-Lab Program that prevented “brain drain” of scientists after collapse of the Soviet Union.

# Distinguished Service Award

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*Presented to:*  
**Dr. John Bennion**  
**GE Hitachi**

In recognition of his lifelong service to increase public understanding of nuclear science and engineering by promoting the importance of professional licensure at the section, division, and national level.

# Leadership Award

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*Presented to:*

**Dr. Rebecca L. Steinman**  
**Exelon Generation**

In recognition of her unwavering commitment and continuous drive towards excellence to increase public understanding of nuclear science and engineering by contributing to the work of professional associations, schools, and the professional, scientific and technical press.

# Presidential Citation

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*Presented to:*

**ANS Young Members Group**

For outstanding leadership in generating digital content and creating value for the Society.

# AWARDS PRESENTED ELSEWHERE

## Outgoing President Appreciation

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*Presented to:*

**Marilyn Kray,  
President, American Nuclear Society,  
2019-2020**

For outstanding leadership and dedication during her term as President of the American Nuclear Society (ANS).

During her term, Marilyn Kray represented ANS at various venues worldwide by highlighting the importance of nuclear applications in the world today and in the future. In addition, she deftly led the Society through times of unprecedented challenges, including implementation of significant staff and organizational restructuring designed to create more financially sustainable operations, and adjusting all Society activities to accommodate the COVID-19 pandemic.

For this and other contributions to ANS and the nuclear community it represents we thank Marilyn Kray for her service.

# DIVISION-ADMINISTERED AWARDS

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## FCWMD Lifetime Achievement Award

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*Presented to:*

**Dr. Andrew G. Sowder**  
**Electric Power Research Institute**

For years of exceptional service to ANS and the nuclear industry in the areas of spent fuel reprocessing and disposal, accident tolerant fuel, and nuclear fuel cycle analysis. This award will be presented in November.

## FCWMD Significant Contribution Award

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*Presented to:*

**Dr. Fiona E. Rayment**  
**National Nuclear Laboratory UK**

For her significant contributions to the nuclear industry across the globe and for her commitment to promoting diversity. This award will be presented in November.

## FCWMD Distinguished Service Award

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*Presented to:*

**Mr. Jeffery R. Brault**

For his constant dedication and enthusiasm towards the American Nuclear Society, and sustained commitment to the Fuel Cycle & Waste Management Division's mission. This award will be presented in November.

# Don Miller Nuclear Instrumentation, Control and Human-Machine Interface Technology Awards (HFICD)

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*Presented to:*

**Mr. David L. Rahn**  
**U.S. Nuclear Regulatory Commission**

In recognition of outstanding achievement in the application of Instrumentation, Control and Human-Machine Interface Technologies.

For his development of methods and criteria for assessing the capability of equipment to perform reliably and for ensuring the conditions within nuclear reactors can be adequately monitored after a severe accident. This award will be presented in November.



*Presented to:*

**Dr. Richard T. Wood**  
**University of Tennessee Knoxville**

In recognition of outstanding achievement in the application of Instrumentation, Control and Human-Machine Interface Technologies.

In recognition of his lifelong commitment and contributions to nuclear digital system design, licensing, and standards, with an emphasis on all aspects of digital system safety, reliability, and qualification in the United States and international communities. Presented in November.

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

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*Presented to:*

**Ms. Pareez E. Golub**  
**Sargent & Lundy**

In recognition of outstanding midcareer contribution to nuclear instrumentation and control technologies.

For outstanding and sustained contributions to ANS, HFICD, and the field of digital instrumentation and control, and for leadership in revising the NRC licensing process for digital protection systems and increasing utility confidence and clarity in the implementation of digital protection systems upgrades. This award will be presented in November.

# Ted Quinn Early Career Award (HFICD)

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*Presented to:*

**Mr. Samir Darbali**  
**U.S. Nuclear Regulatory Commission**

In recognition of outstanding early career contributions to nuclear instrumentation and control technologies.

For exceptional engineering accomplishments in protecting public health and safety by ensuring the safe operation of nuclear power plants through advancements in the licensing process, SDOE and EMP guidance. Presented in November.



# W. Bennett Lewis Award (DESD)

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*Presented to:*  
**Dr. William H. Hannum**

In recognition of his valuable contributions to the development of sustainable energy, in particular for his lifelong leadership and untiring efforts in advancing safe and environment-friendly nuclear energy by means of fast-neutron fission technology including its fuel cycle. Presented in November.

# Arthur Holly Compton Award in Education (ETWDD)

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*Presented to:*  
**Dr. X. George Xu**  
**Rensselaer Polytechnic Institute**

For his legacy as a teacher, mentor, and researcher who has impacted a generation of nuclear engineers and health/medical physicists at Rensselaer and beyond.

# 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 2020-2021 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

William Gordon - Libertyville High School (IL)  
Arushi Harkawat - Liberal Arts and Science Academy High School (TX)  
Brendan McCluskey - Neuqua Valley High School (IL)  
Landry Wells - Central Magnet School (TN)  
Zhouhui Wu - California High School (CA)

### ANS Undergraduate (Sophomore)

Jasmine Dinari - University of Illinois at Urbana-Champaign  
Benjamin McNeely - University of Massachusetts- Lowell  
Sierra Tutwiler - Virginia Commonwealth University  
Katy Worrell - University of Tennessee, Knoxville

### ANS Undergraduate (Junior/Senior)

Ketaki Joshi - University of Tennessee - Knoxville  
Zachary Lalliss - Utah State University  
Thomas Mundy - University of Michigan - Ann Arbor  
Maddie Ratner - University of Tennessee - Knoxville  
Erik Smith - University of Illinois at Urbana-Champaign  
William Welch - University of California, Los Angeles

### Angelo F. Bisesti Memorial Scholarship

Ammon Black - Utah State University

### Raymond DiSalvo Memorial Scholarship

Samuel Varghese - University of California, Berkeley

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

Jack Fletcher - Missouri University of Science and Technology  
Jeremy Mateja - Purdue University

### John R. Lamarsh Memorial Scholarship

Abigail M. Davis - North Carolina State University

### Hans P. Loewen Memorial Scholarship

Madison Allen - University of Tennessee, Knoxville

### Accelerator Applications Division Scholarship

Noah M. Higgins - North Carolina State University

### Decommissioning and Environmental Sciences Division Undergraduate Scholarship

Kaylee M. Cunningham - University of Florida

### ANS Joseph Naser HFIC Division Undergraduate Scholarship

Not awarded

### Operations and Power Division Scholarship

Eli Boland - Missouri University of Science & Technology  
Brian Merritt - Brigham Young University

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

Jacob M. Halpern - Purdue University

### Rudy Stamm'ler Undergraduate Reactor Physics Scholarship

Emily H. Vu - University of Michigan, Ann Arbor

### Charles (Tommy) Thomas Memorial Scholarship

Gregory A. Ryba - University of New Mexico

# American Nuclear Society Scholarship Award Recipients

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## •GRADUATE CATEGORY•

### **ANS Graduate**

Junghyun Bae - Purdue University  
Adam Darr - Purdue University  
Robert Olsen - Oregon State University  
Roxanne Pinsky - University of Michigan  
Rittu Raju - University of Michigan  
Mara Watson - Clemson University

### **Everitt P. Blizard Graduate Scholarship**

Kalin R. Kiesling - University of Wisconsin-Madison

### **Robert A. Dannels Memorial Scholarship**

Alexander E. Perry - Texas A&M University

### **Decommissioning & Environmental Sciences Division Graduate Scholarship**

Anna Deak - Colorado State University

### **Ely M. Gelbard Graduate Scholarship**

Michael Hua - University of Michigan

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

Miriam A. Kreher - Massachusetts Institute of Technology

### **ANS Lawrence E. Hochreiter Graduate Scholarship**

Ishak Johnson - University of California, Berkeley

### **Saul Levine Memorial Scholarship**

Aaron Huxford - University of Michigan, Ann Arbor

### **Michael J. Lineberry Graduate Scholarship**

Kathryn Mummah - University of Wisconsin-Madison

### **Nuclear Criticality Safety Pioneers Scholarship**

Nina C. Fleming - North Carolina State University

### **Fuel Cycle & Waste Management Division John D. Randall Scholarship**

Dimitris Killinger - Virginia Commonwealth University

### **James F. Schumar Scholarship**

Pierre-Clément A. Simon - Pennsylvania State University

### **Robert E. Uhrig Graduate Scholarship**

Sawyer B. Irvine - University of Tennessee, Knoxville

### **Vogt Radiochemistry Scholarship**

Samantha A. Labb - Colorado State University

## • NEED Scholarships •

### **John and Muriel Landis Scholarships**

Madison Allen - University of Tennessee - Knoxville  
Sarah E. Ebert - North Carolina State University  
Megan E. Hoover - Clemson University  
Kalin R. Kiesling - University of Wisconsin-Madison  
Sierra A. Tutwiler - Virginia Commonwealth University

### **• Community College/Trade School Scholarship • Kent Hamlin Memorial Scholarship**

Zachary Deziel - Three Rivers Community College  
Daniel Nevius - North Carolina State University

### **• Local Section Scholarships • ANS Oak Ridge / Knoxville Local Section Graduate Scholarship**

Amanda M. Bachman - University of Illinois, Urbana-Champaign

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

Charles M. McSwain - University of Tennessee, Knoxville

### **Pittsburgh Local Section Graduate Scholarship**

Turner Cotterman - Carnegie Mellon University

### **Pittsburgh Local Section Undergraduate Scholarship**

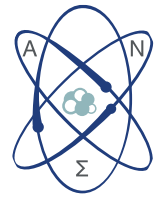
Veronica Heyl - North Carolina State University

### **Washington, DC Local Section Undergraduate Scholarship**

Philip Dodge - University of Maryland, College Park

# Alpha Nu Sigma National Honor Society

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*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 2020:*

## **Rensselaer Polytechnic Institute**

### **Alpha Nu Sigma**

Ryan Bedell  
Camden Eugene Blake  
Peter Brain  
Matthew Phillip Doty Clark  
Anthony Dai  
Jake Fay  
Alexander Fung  
Myles John Gavilan  
Alexander Sebastian Hauck  
Brendan Lutz  
Victoria Isabel Makara  
Max Rose  
Gregory Siemers  
Kyle Matthew Warns

## **The Ohio State University**

### **Alpha Nu Sigma**

Matthew George Bisbee  
Tseelmaa Byambaakhuu  
Wei Gao  
Timothy Daniel Miles  
Ananthi Renganathan  
Joshua Rocheleau  
Nathan Maxwell Smith

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

### **Alpha Nu Sigma**

Nathan Daniel Ault  
Travis John Catina  
Collin Randall Combs  
Sean Oliver Fitzsimons  
Mathew Benjamin Flynn  
Christopher Adam Johnson  
Michael Kenneth Moore  
Nathaniel Elkin Peek  
Jeffrey Scott Price  
Nathan James Schubring  
Jerod William Warren

## **University of Michigan**

### **Alpha Nu Sigma**

Anil Bansal  
Isaac Gabriel Dabkowski  
Thomas Folk  
Colton Ward Graham  
Nicholas F. Herring  
Lincoln Johnston  
Joseph Messina  
Bryan Morgan  
Valentin Pauly  
Eric John Pearson  
Keegan Donovan Pombier  
Reid Sobota  
Rigoberto Vazquez, Jr.

## **University of Tennessee**

### **Alpha Nu Sigma**

Kyle E. Anderson  
Mr. Andrew William Decker  
Robert Kile  
Mairead Montague  
Quinton Jace Terry  
John Charles Wagner

## **Massachusetts Institute of Technology**

### **Alpha Nu Sigma**

Mr. Brandon Aranda  
Mr. Norman Cao  
Mr. Loukas Leonidas Carayannopoulos  
Mr. Florian Chavagnat  
Mr. Benjamin Dacus  
Mr. Liam Hines  
Mr. Haeseong Kim  
Mr. Ethan Avram Klein  
Maj. William Lawrence Koch  
Mr. Evan Leppink  
Ms. Peninah Levine  
Ms. Jane Reed  
Mr. Shangjie Xue



# ANS Annual Meeting

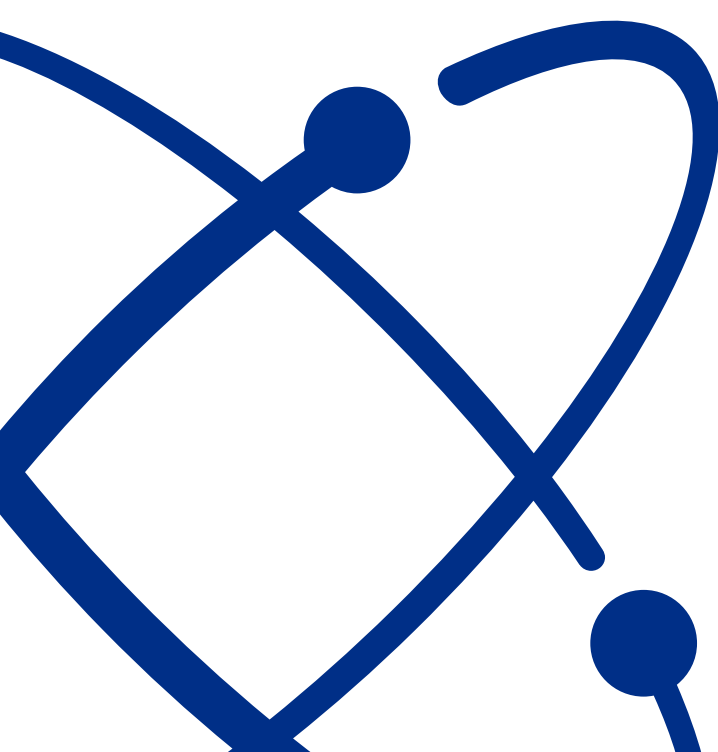
2020

## Countdown to 2030

Framing the Nuclear Technology Agenda for the Next 10 Years

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American Nuclear Society  
555 N. Kensington Ave.  
La Grange Park, IL 60526  
[www.ans.org](http://www.ans.org)