ASME 2024 HONORS & AWARDS

ADRIAN BEJAN

ASME Medal

The ASME Medal was established in 1920 and is awarded for eminently distinguished engineering achievement. It is the highest award the society can bestow.

Adrian Bejan, Ph.D., J.A. Jones distinguished professor of mechanical engineering at Duke University, is honored for unprecedented creativity, breadth, and permanent impact on engineering; for developments in the new science of energy, motion, form, and evolution; and for building bridges to design in biological, geophysical, and sociological systems.

An eminent scholar in his field, Dr. Bejan is credited with several groundbreaking developments. He unified thermodynamics with heat transfer, fluid dynamics, and the science of form (i.e., flow configuration, image, and design), as a counterweight to the doctrine of reductionism; discovered, taught, and applied the constructal law of evolution in nature; and brought together biologists, physicists, engineers, sociologists, philosophers, economists, managers, and athletes with creative books for the public, including *Design in Nature* (2012), *The Physics of Life* (2016), *Freedom and Evolution* (2020), and *Time and Beauty* (2022). His influential work and prolific publication record have earned him 18 honorary doctorates from 11 countries. He holds a position among the top 0.01% most-cited scientists, is the 6th most cited scholar in mechanical engineering worldwide, and is the 11th most-cited across all engineering disciplines.

Dr. Bejan is the recipient of many prior honors. He is a prior Benjamin Franklin Medal recipient, a Nautilus Books Award winner for *Time and Beauty*, the winner of the Kimberly-Clark distinguished lectureship from the International Society of Porous Media, a recipient of the Lifetime Achievement Award from the International Association of Green Energy, and, from ASME, a prior awardee of the Ralph Coats Roe Medal, the Edward F. Obert Award, and the Max Jakob Memorial Award. He was named Knight of the French Order of Academic Palms in 2020.

Dr. Bejan earned his B.S., M.S., and Ph.D. at the Massachusetts Institute of Technology in 1971, 1972, and 1975, respectively.

OSCAR BARTON JR.

Edwin F. Church Medal

The Edwin F. Church Medal, established in 1972, is awarded to an individual who has rendered eminent service that has increased the value, importance, and attractiveness of mechanical engineering education.

Oscar Barton Jr., Ph.D., dean and professor of engineering at Morgan State University, is honored for lifelong devotion to engineering education in the classroom and as an academic leader; for opening doors to engineering education for students who are underrepresented in the profession; and for exemplary service to our nation.

Prior to joining Morgan State in 2020, Dr. Barton held academic and leadership positions at the U.S. Naval Academy and George Mason University. At the Naval Academy, where he served as the chair of the Department of Mechanical Engineering, Dr. Barton led efforts to establish the nuclear engineering program. As the inaugural chair of the Department of Mechanical Engineering at George Mason, he pioneered dual admission programming that sustainably increased matriculation of community college students into B.S. programs. At Morgan State, Dr. Barton established the first B.S. program in mechatronics engineering at a public university in Maryland, and the first ever at an HBCU.

Dr. Barton's advocacy for engineering education is reflected in his work for several organizations, including ASME, ABET, and ASEE. He is the former chair of the Committee on Engineering Accreditation and the Committee on Engineering Education. Dr. Barton is also a member of the Engineering Accreditation Commission of the ABET and was a founding member of the ASEE's Military and Veteran Affairs division. Currently, he serves on the ASME Foundation Board of Directors and chairs its audit committee. He is the 2024 awardee of both the IEOM Distinguished Educator Award and the MDSPE Industry Icon Award.

Dr. Barton earned his B.S. in mechanical engineering at Tuskegee University in 1984, and his M.S. and Ph.D. at Howard University in 1987 and 1993, respectively.

M. STANLEY WHITTINGHAM

Richard J. Goldstein Energy Lecture Award

The Richard J. Goldstein Energy Lecture Award, established in 2019, recognizes pioneering contributions to the frontiers of energy leading to breakthroughs in existing technology, to new applications or new areas of engineering endeavor, or to policy initiatives.

M. Stanley Whittingham, D.Phil., distinguished professor of chemistry and materials science and engineering at Binghamton University, is recognized for pioneering work and new discoveries in solid state ionics that have led to the development of lithium batteries for portable energy storage, transforming the way energy is stored, consumed, and conserved.

Prior to joining Binghamton, Dr. Whittingham worked for Schlumberger NV, Exxon Research & Engineering, and Stanford University. At Binghamton, Dr. Whittingham has also served as the vice provost for research and the vice-chair of the Research Foundation of the State University of New York.

Dr. Whittingham is a renowned scholar in the field and maintains research interests in the limiting mechanisms of intercalation reactions, development of new materials, and the preparation and chemical and physical properties of novel inorganic oxide materials for advancing energy storage. Presently, Dr. Whittingham leads the Battery-NY, $113 million economic development effort and is the Chief Innovation Officer of the recently awarded NSF Upstate New York Energy Storage Engine.

Dr. Whittingham is the recipient of many prior awards. He was named a 2019 Nobel Laureate for his work on lithium rechargeable batteries and awarded the 2023 VinFutures Grand Prize. He was a Thomson Reuters Citation Laureate in 2015, named a member of the National Academy of Engineering in 2018, and, also in 2018, received the Turnbull Award from the Materials Research Society. He remains active in several professional societies, including the American Chemical Society, the American Physical Society, and the Electrochemical Society.

At Oxford University, Dr. Whittingham completed his B.A. in 1964, his M.A. in 1967, and his D.Phil. in 1968.

KENNETH A. WARREN

Holley Medal

The Holley Medal, established in 1924, recognizes an individual whose engineering accomplishments have contributed to the betterment of society.

Kenneth A. Warren, past vice president of engineering at ExxonMobil's Research and Engineering company, is recognized for pioneering contributions to engineering, including a standards-based, open, interoperable, and secure process automation architecture that is leading to new manufacturing and process control breakthroughs.

After a 40-year career with Exxon and ExxonMobil, where he oversaw a global engineering organization providing technical support to ExxonMobil refineries and chemical plants, Mr. Warren retired in 2020. At ExxonMobil, Mr. Warren had previously held various technical, supervisory, and managerial positions, including vice president of basestocks, specialties, and asphalt sales; manager of the Joliet Refinery; global aviation director; and vice president of engineering. Mr. Warren was the first African American engineer to serve as a refinery manager at ExxonMobil and, in his capacity as vice president of engineering, his leadership and support contributed to the development and design of the open process automation standard, a highly disruptive, paradigm-shifting process automation architecture.

Mr. Warren's interest in innovative engineering solutions is matched by his zeal for mentorship and the development of future engineering professionals. Throughout his career, he fostered networks of minority engineers, providing resources and bridges for men and women of color to advance their careers. An advocate for social good and for diversity in the profession, he has served on National Society of Black Engineers corporate advisory board, the Howard University industry advisory board, and the board of Voices for Americas Children.

Since his retirement, Mr. Warren has gone on to serve on the board of the Cynthia Woods Mitchell Pavilion in Woodlands, Texas, and the executive committee of the Jamaican Howard University Affinity Network.

Mr. Warren earned his B.S. in mechanical engineering from Howard University in 1980.

MADIHA EL MEHELMY KOTB

Ralph Coats Roe Medal

The Ralph Coats Roe Medal was established in 1972 to recognize outstanding contributions toward a better public understanding and appreciation of the engineer's worth to contemporary society.

Madiha El Mehelmy Kotb, retired engineer and veteran of the Provincial Government of Quebec, is honored for outstanding public service and a lifelong commitment and dedication to engineering safety; for leadership and initiative in creating opportunities for sustainable solutions for under-served communities worldwide; and for inspiring future generations of engineers as a speaker and author.

Born in Egypt before relocating to Canada in the 1970s, Ms. Kotb began her career in government service in the 1980s and, during her tenure, served as the Chief Boilers and Pressure Vessels Inspector with the government of Quebec. Ms. Kotb has also served the field of mechanical engineering in multiple ASME roles, most notably working toward the advancement of ASME Safety Standards and Conformity Assessment Programs, serving as a member of the ASME Engineering for Global Development committee, and serving as the 132nd ASME President, the fourth woman and first woman from the Middle East to do so. Additionally, she has been lead volunteer member for Engineering for Change (E4C) and a member of the E4C, LLC management committee.

Ms. Kotb is the recipient of several prior honors, including honorary membership in the National Board of Boiler and Pressure Vessel Inspectors, the CSA Group John Jenkins Award, the 2016 National Board Safety Medal, and the ASME Dedicated Service award. She currently serves on the board of directors of Catapult Design, Inc., a not-for-profit design firm working toward design for social impact.

Ms. Kotb began her engineering education at the American University in Cairo before completing her B.S. and M.S. in mechanical engineering at Concordia University in Montreal. She earned these degrees in 1976 and 1981, respectively.

MARCO AMABILI

Honorary Membership

Marco Amabili, Ph.D., Chair professor of engineering at Westlake University - Hangzhou, China, is honored for pioneering contributions to dynamics and fluid-structure interaction of shells and plates in traditional, advanced composite, and soft biological materials, and for leadership and service to the engineering societies.

An emeritus distinguished James McGill professor at McGill University in Montreal, Dr. Amabili is a renowned expert in vibrations and fluid-structure who has made groundbreaking contributions to the study of nonlinear vibrations of shells and plates made of traditional, advanced composite, and soft materials. Applications of Dr. Amabili's research span several fields, including aeronautics, vascular mechanics, mechanical engineering, civil engineering, and energy generation. His research has led to over 500 scientific papers in vibrations and applied mechanics, and his 2008 monograph from Cambridge University Press, *Nonlinear Vibrations and Stability of Shells and Plates*, garnered him the Worcester Reed Warner Medal from ASME.

In addition to the Worcester Reed Warner, Dr. Amabili is the recipient of several prior honors. He has been elected to the Royal Society of Canada, the National Academy of Engineering, the Canadian Academy of Engineering, Academia Europaea, the European Academy of Sciences, the Engineering Institute of Canada, and is a Fellow of ASME. He is a past recipient of the Raymond D. Mindlin Medal of the American Society of Civil Engineers, the Cataldo Agostinelli and Angiola Gili-Agostinelli International Prize of the Lincei National Academy of Sciences of Italy, the Guggenheim Fellowship in engineering, the Rayleigh Lecture Award, and the Blaise Pascal Medal in Engineering. He is the co-editor-in-chief of *International Journal of Mechanical System Dynamics*, contributing editor of the *International Journal of Non-linear Mechanics*, and associate editor of *Journal of Fluids and Structures* and *Mechanics Research Communications*, among many others.

Dr. Amabili completed his M.Sc. in 1992 at the University of Ancona and his Ph.D. at the University of Bologna in 1996.

SUBIR CHOWDHURY

HONORARY MEMBERSHIP

SUBIR CHOWDHURY, CHAIRMAN AND CEO of ASI consulting group, is honored for distinguished quality engineering and management achievement by improving both product and process quality in all types of industries, and for lifelong service to the engineering profession through writing, teaching, consulting, and the promotion of quality globally.

Mr. Chowdhury has served as chairman and CEO of ASI Consulting for over two decades. Previously, he was executive vice president of American Supplier Institute, Inc. A pioneering expert in quality engineering globally, he has authored over 15 books in the area, including *The Ice Cream Maker*, *The Power of Six Sigma*, and *The Difference*. He has worked with several high-profile clients, including Fiat-Chrysler, Ford, General Motors, Hyundai Motor Company, Procter & Gamble, Bosch, Caterpillar, and the state of Michigan. He is credited with having created the first school of quality and reliability at the Indian Institute of Technology and the first center for Bangladeshi studies in the United States at the University of California, Berkeley. Additionally, he has been instrumental in establishing graduate fellowships on quality and economics at Harvard University and the London School of Economics.

A recipient of many previous honors, Mr. Chowdhury has been named honorary member of both the World Innovation Foundation and the Institute of Industrial and Systems Engineers, and has been inducted into the Engineering, Science, and Technology Hall of Fame. He is a past recipient of the Soichiro Honda Medal, the ASQ Distinguished Service Medal, the SAE Arnold W. Siegel Humanitarian Award, the SME Gold Medal, the SAE Henry Ford Distinguished Award for Excellence in Automotive Engineering, and the Mensforth Gold Medal, among many others. He is a fellow or honorary member of 11 professional societies.

In addition to honorary doctorates from Michigan Tech, Central Michigan University, and the University of Western Ontario, Mr. Chowdhury completed his B. Tech. at the Indian Institute of Technology in 1989 and his M.A. at Central Michigan University in 1993.

MICHAEL KHONSARI

HONORARY MEMBERSHIP

MICHAEL KHONSARI, PH.D., DOW Chemical endowed chair and professor of mechanical engineering at Louisiana State University, is honored for lifetime service to mechanical engineering research and education, particularly through technical books, and trendsetting research papers.

In addition to his professorship, Dr. Khonsari concurrently serves as associate commissioner for research at the Louisiana Board of Regents and is the director of the NSF Center for Innovations in Structural Integrity Assurance. Before LSU, he was a faculty member at The Ohio State University, the University of Pittsburgh, and Southern Illinois University. He has served as faculty research Fellow at the NASA Glenn Research Center, the Department of Energy, and the Wright-Patterson Air Force base.

A renowned expert in tribology, thermomechanical modeling, and fatigue testing and analysis, Dr. Khonsari is the author or co-author of over 450 publications, 3 technical books, and 15 encyclopedia articles. He has also served as the editor-in-chief of the *Journal of Tribology*, is the field chief editor of *Frontiers in Mechanical Engineering*, and currently serves on the editorial board of 10 scientific journals. His expertise is reflected in this work and his numerous prior honors, including the ASME Mayo D. Hersey and Burt L. Newkirk Awards, the NLGI Clarence E. Early Memorial Award, and the NLGI Ralph Beard Memorial Academic Award.

Dr. Khonsari has mentored nearly 100 postdoctoral researchers, Ph.D. and M.S. graduates, and visiting scholars. He has worked on various industrial projects for the last 25 years and his recent research focuses on entropy-based life assessment and accelerated testing applied to surface degradation and fatigue.

Dr. Khonsari is a Fellow of the National Academy of Inventors, the American Association for the Advancement of Science, the Society of Tribologist and Lubrication Engineers, ASME, and is a member of Sigma Xi. He completed his B.S., M.S., and Ph.D. at The University of Texas at Austin, in 1978, 1979, and 1983, respectively.

ZHUOMIN ZHANG

HONORARY MEMBERSHIP

ZHUOMIN ZHANG, PH.D., J. ERSKINE LOVE Jr. professor of mechanical engineering at the Georgia Institute of Technology, is honored for outstanding contributions to research, education, and publishing in microscale and nanoscale thermal transport, especially in thermal radiation and radiative properties of micro- and nanostructured materials for energy harvesting, and for dedicated service to scientific and engineering societies.

A prolific researcher, Dr. Zhang is well-regarded for his contributions to the theory and measurements of spectral radiative properties of solids and thin films, and to micro- and nanostructures, including photonic crystals, gratings, carbon nanotube arrays, metamaterials, and two-dimensional electronic and phononic materials. Prior to joining Georgia Tech, Dr. Zhang was a guest scientist in the Optical Technology Division of the National Institute of Standards and Technology (NIST) and a faculty member at the University of Florida. At Georgia Tech, Dr. Zhang's research group investigates fundamental mechanisms of thermal radiation and the design and fabrication of suitable micro- and nanostructures for nanoelectronics, microscale thermophotovoltaic devices, nanothermal manufacturing, surface thermal metrology, and biotechnology.

Dr. Zhang is the author or co-author of over 240 journal articles and chapters, has delivered more than 400 keynotes, invited talks, and presentations, and published *Nano/Microscale Heat Transfer*, a textbook adopted by numerous universities around the world. He is an executive committee member of the ASME Heat Transfer Division, the founding chair of the K-9 Committee on Nanoscale Thermal Transport, and the former associate editor of the *Journal of Heat Transfer*. He is the recipient of several recent honors, including the ASME Yeram S. Touloukian Award and the AIAA Thermophysics Award. He has been named Fellow of the American Physical Society and the American Association for the Advancement of Science and Associate Fellow of the American Institute of Aeronautics and Astronautics.

After completing his B.S. and M.S. degrees at the University of Science and Technology of China – Hefei, Dr. Zhang completed his Ph.D. at the Massachusetts Institute of Technology in 1992.

JEAN ZU

HONORARY MEMBERSHIP

JEAN ZU, PH.D., LORE E. FEILER DEAN and professor at the Charles V. Schaefer Jr. School of Engineering and Science at the Stevens Institute of Technology, is honored for outstanding work as a mechanical engineering researcher, especially in the areas of dynamics and mechanical vibrations, leadership in academia and the wider engineering community, and dedicated efforts in championing diversity in engineering.

Dr. Zu joined Stevens as dean in 2017. Prior to that position, she served as the first female and Asian chair of the department of mechanical and industrial engineering at the University of Toronto, which she joined in 1994. Dr. Zu has extensive expertise in the areas of mechanical vibrations, dynamics, and mechatronics with applications across the areas of biomedical instrumentation and energy harvesting. She has a lengthy track record of successful collaborations with industry leaders and funders. She has collaborated extensively with several companies on research projects with implications toward various automotive applications and raised over $5 million in research funding, primarily as a lead investigator, with 40 grants and sponsored programs. As a result of a robust and successful research program, Dr. Zu has published 340 papers, including 180 journal papers, obtained 5 patents, and advised 36 Ph.D. students in her academic career.

A testament to her expertise, Dr. Zu is a prior recipient of several awards—including the John B. Stirling Medal, Donald E. Marlowe Medal, and Queen Elizabeth II Diamond Jubilee Medal—and was recognized in 2019 as one of the Notable Women in Technology by *Crain's New York Business*. She is a Fellow of CAE, ASME, EIC, CSME, and AAAS, and has served as president of the Canadian Society for Mechanical Engineering, as a member on NSERC Grant Selection Committee, and as the associate editor of the *Journal of Vibration and Acoustics*. She has also served as the president of the Engineering Institute of Canada.

Dr. Zu completed her B.Sc. and M.Sc. at Tsinghua University in 1984 and 1986. She completed her Ph.D. at the University of Manitoba, Canada, in 1993.

ASME 2024 HONORS & AWARDS

Adaptive Structures and Material Systems Award

PAOLO ERMANNI

Established by the Aerospace Division in 1993 and elevated to a Society award in 2014, the Adaptive Structures and Material Systems Award recognizes a senior researcher for a lifetime of significant contributions to the sciences and technologies associated with adaptive structures and/or material systems.

Paolo Ermanni, Dr. sc. tech., professor of composite materials and adaptive structures at ETH Zurich, is recognized for significant contributions to the concurrent design and optimization of morphing structures using smart materials, the integration of high-end manufacturing in adaptive structures, and the development of electromechanical systems for vibration and wave propagation control.

Dr. Ermanni joined ETH Zurich in 1998, rising to full professor in 2003. His current research is concerned with the innovative design, material architectures, and advanced processing technologies of high-performance composite structures. He has supervised 67 doctoral theses, served on multiple editorial boards, and is an author on several award-winning publications.

Avram Bar-Cohen Memorial Medal

JOHN H. LAU

Formerly known as the InterPACK Achievement Award, the Avram Bar-Cohen Memorial Medal was elevated to a Society award in 2022 to recognize contributions to academic, research, and industrial communities in the broad field of heat transfer and related electronics, photonics, mechanics, and packaging phenomena.

John H. Lau, Ph.D., senior special project assistant at Unimicron Technology Corporation, is recognized for pioneering contributions to electronic packaging through a sustained series of books, papers, and lectures on the flip chip, fan-out, 3D IC integration, chiplet, and heterogeneous integration, which have defined the landscape and potential future of advanced packaging.

Prior to joining Unimicron in 2021, Dr. Lau held multiple positions in industry and academia, garnering over 40 years' experience in semiconductor packaging manufacturing, research, and development. He is an author or coauthor of 528 peer-reviewed papers and 23 textbooks and holds 53 issued and pending U.S. patents. He was awarded his Ph.D. in 1977 from the University of Illinois—Urbana-Champaign.

Zdeněk P. Bažant Medal

YONG ZHU

The Zdeněk P. Bažant Medal was established in 2022 by the Applied Mechanics Division and recognizes an individual who has made significant contributions to the field of mechanics through research, practice, teaching and/or outstanding leadership.

Yong Zhu, Ph.D., Andrew A. Adams distinguished professor of mechanical engineering at North Carolina State University, is honored for significant contributions to the field of nanomechanics through the development and application of novel, innovative instrumentation to discover new deformation mechanisms and understand their mechanistic origins, leading to advances in the mechanics of nanomaterials for both soft electronics and soft robotics.

Dr. Zhu's research is focused on mechanics and engineering applications of nanomaterials. He has published over 150 peer-reviewed journal articles and 9 book chapters and delivered over 120 invited and keynote presentations. Dr. Zhu is past chair of the ASME Materials Division and currently serves on the Board of Directors for the Society of Engineering Science and the U.S. National Committee on Theoretical and Applied Mechanics. He completed his Ph.D. at Northwestern University in 2005.

Bergles-Rohsenow Young Investigator Award in Heat Transfer

DAVID M. WARSINGER

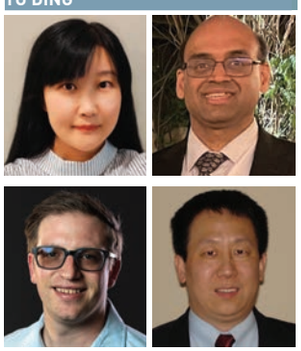
The Bergles-Rohsenow Young Investigator Award in Heat Transfer, established in 2003, recognizes an engineer who is committed to pursuing research in heat transfer and demonstrates the potential to make significant contributions in the field.

David M. Warsinger, Ph.D., assistant professor at Purdue University, is recognized for transformative contributions to heat and mass transfer through high-impact research, invention, technology translation, mentorship, and outreach, promoting new understanding of nano-scale transport phenomena and developments in dehumidification, thermal desalination, and membrane desalination technologies.

Dr. Warsinger's current research uses thermofluids and materials science for improving the performance and capabilities of sustainable membrane technologies with applications for desalination, water treatment, water harvesting, heat and mass transfer in membranes, thermophoresis, and HVAC membranes. He is the prior recipient of six other international awards for young scientists, including the Austin F. McCormack Jr. Award from the American Water Works Association and the Early Career Award from the Universities Council on Water Resources.

Blackall Machine Tool and Gage Award

SHILAN JIN
SATISH T.S. BUKKAPATNAM
SEAN HAYES
YU DING



The Blackall Machine Tool and Gage Award, established in 1954, is presented for the best current original papers presented before ASME that have resulted in a significant contribution to the manufacturing, design, or application processes of machine tools, gauges, dimensional measuring instruments, or new manufacturing technologies and metrology approaches.

Shilan Jin, Ph.D., Satish Bukkapatnam, Ph.D., Sean Michael Hayes, and Yu Ding, Ph.D., are recognized for the paper titled "Vibration Signal-Assisted Endpoint Detection for Long-Stretch, Ultraprecision Polishing Processes."

Dr. Shilan Jin is currently a postdoctoral researcher at Texas A&M University, where she collaborates with the Lawrence Livermore National Laboratory on data-driven decision making for ultraprecision spherical surface polishing. She is a 2020 recipient of The NSF Data-Enabled Discovery and Design of Energy Materials Fellowship.

Dr. Satish T.S. Bukkapatnam is regents professor and Rockwell professor of industrial and systems engineering at Texas A&M, where he researches smart manufacturing systems and ultraprecision manufacturing. He is the prior editor of the ASME *Journal of Manufacturing Science and Engineering* and currently serves as a member of the Intelligent Manufacturing Technology Group.

Sean Hayes is a staff scientist at the Lawrence Livermore National Laboratory. His primary focus is on developing new capabilities and process improvements for HDC capsule fabrication for use at National Ignition Facility.

Dr. Yu Ding is the Anderson-Interface chair and professor at the Georgia Institute of Technology. His primary area of research is in data and quality science. He is the author of *Data Science for Wind Energy* (2019) and a coauthor of *Data Science for Nano Image Analysis* (2021).

Thomas K. Caughey Dynamics Medal

FRIEDRICH PFEIFFER

The Thomas K. Caughey Dynamics Medal commemorates Dr. Thomas K. Caughey's contributions to research and to the society. The medal, established in 2008 by the Applied Mechanics Division and elevated to a Society award in 2020, is conferred in recognition of an individual who has made significant contributions to the field of nonlinear dynamics through practice, research, teaching and/or outstanding leadership.

Friedrich Pfeiffer, Dr.-Ing., former faculty in applied mechanics at Technische Universität München, is recognized for significant contributions to the research, education, and practice of nonlinear dynamics, resulting in significant advancements in the modeling, analysis, simulation, design, and manufacture of robotics, aerospace systems, and mechanical and fluid power transmissions.

With a five-decade career in academia and industry, Dr. Pfeiffer is the recipient of many prior honors, including the BMW Scientific Award, the Order of Merit FRG, Order of Merit Bavaria, the Calvin W. Rice Lecture Award, and the ASME Leonardo da

Vinci Award. He has received honorary doctorates from the Russian Academy of Sciences and Technische Universität Dresden, and was named emeritus of excellence by the University of Bologna.

DeVor-Kapoor Manufacturing Medal

S. JACK HU

The DeVor-Kapoor Manufacturing Medal, established in 2022, recognizes an individual or a team of researchers for a body of impactful achievements in the field of manufacturing.

S. Jack Hu, Ph.D., UGA Foundation distinguished professor of engineering, senior vice president for academic affairs, and provost at the University of Georgia is honored for pioneering contributions to the quality control of materials joining and assembly systems, significant impacts to sustainable manufacturing, inspirational leadership in cultivating leaders for academia and industry, and advocacy for manufacturing's impacts to society.

Dr. Hu's research in manufacturing systems has been supported by more than $46 million in external funding from agencies such as the U.S. Department of Energy, Department of Commerce, and the National Science Foundation, as well as corporations. He has published nearly 200 journal articles, two books, and many conference papers and book chapters. He is the holder of 10 patents. Dr. Hu completed his doctorate at the University of Michigan in 1990.

Daniel C. Drucker Medal

PRADEEP SHARMA

The Daniel C. Drucker Medal, established in 1997, recognizes distinguished contributions to the field of applied mechanics and mechanical engineering through research, teaching, and service to the community.

Pradeep Sharma, Ph.D., Hugh Roy and Lillie Cranz Cullen distinguished university professor and dean of the college of engineering at the University of Houston, is recognized for pioneering contributions to the foundation of solid mechanics and its connection with statistical mechanics, electricity, and magnetism.

Dr. Sharma is the recipient of many prior honors, including the Young Investigators Award from Office of Naval Research, a Fulbright Fellowship, and the ASME Thomas J.R. Hughes Young Investigator Award, Melville Medal, and Charles Russ Richards Memorial Award. He is a Fellow of ASME, the associate editor of the *Journal of the Mechanics and Physics of Solids*, chief-editor of the *Journal of Applied Mechanics*, and serves on the editorial board of several other journals. His research interests lie broadly in the continuum mechanics of solids and theoretical and computational materials science.

William T. Ennor Manufacturing Technology Award

YUEBIN GUO

The William T. Ennor Manufacturing Technology Award was established in 1990 by the ASME Manufacturing Engineering Division and the Alcoa Company to recognize an individual or team for developing or contributing significantly to an innovative manufacturing technology, the implementation of which has resulted in substantial economic or societal benefits.

Yuebin Guo, Ph.D., Henry Rutgers professor of advanced manufacturing at Rutgers University, is honored for significant contributions to hard machining process development, surface integrity characterization, and functionality validation, which have led to significant economic and sustainability impacts in the machining industry.

Dr. Guo is a recognized expert in manufacturing whose work has led to the establishment of the New Jersey Advanced Manufacturing Institute, which houses the first 5G-enabled future manufacturing platform at a U.S. university. Dr. Guo's work there and elsewhere has generated broad impacts for manufacturing research, industry practice, and workforce development. Dr. Guo is also the recipient of many recent awards, including the Board of Trustees Award for Excellence and Research at Rutgers University and the SME Albert M. Sargent Progress Award.

Nancy DeLoye Fitzroy and Roland V. Fiitzroy Medal

JAVAD MOSTAGHIMI

The Nancy DeLoye Fitzroy and Roland V. Fitzroy Medal, established in 2011, recognizes pioneering contributions to the frontiers of engineering that have led to breakthroughs in existing technology or to new applications or areas of engineering endeavor.

Javad Mostaghimi, Ph.D., professor of mechanical and industrial engineering at the University of Toronto, is recognized for the co-invention of a novel conical inductively coupled plasma torch for elemental analysis that consumes significantly less argon and less power than conventional cylindrical torches, resulting in savings in argon consumption of up to 2,000,000 liters annually.

In addition to his professorship, Dr. Mostaghimi is the director and co-founder the Centre for Advanced Coating Technologies (CACT), a research center focused on experimental, analytical, and computational research in the areas of thermal spray coatings and plasma processing. He is a member of the editorial board of *Plasma Chemistry and Plasma Processing* and a member of the international review board of the *Journal of Thermal Spray*.

Fluids Engineering Award

SIVARAMAKRISHNAN BALACHANDAR

The Fluids Engineering Award, established in 1968 and elevated to a Society award in 1978, recognizes outstanding contributions to the field over a period of years through research, practice, and/or teaching.

Sivaramakrishnan Balachandar, Ph.D., distinguished professor and Newton C. Ebaugh professor of mechanical and aerospace engineering at the University of Florida, is recognized for fundamental and groundbreaking contributions to the physical processes, modeling, and numerical computations of multiphase flows in environmental, industrial, and high-speed applications.

In addition to his professorship, Dr. Balachandar is also the founding director of the College of Engineering Institute for Computational Engineering at the University of Florida, co-editor-in-chief of the *International Journal of Multiphase Flow*, associate editor of *Theoretical and Computational Fluid Dynamics*, and section editor of *Science Talks*. Previously, he was a professor in the theoretical and applied mechanics department at the University of Illinois Urbana-Champaign, where he also served as the associate head of the department.

Freeman Scholar Award

SUMAN CHAKRABORTY

The Freeman Scholar Award, established in 1970, is bestowed upon a person of wide experience in fluids engineering. The recipient is expected to review a topic in his or her specialty, including a comprehensive statement of the state of the art, and suggest future research needs.

Suman Chakraborty, Ph.D., professor of mechanical engineering at the Indian Institute of Technology – Kharagpur, is honored for the paper titled "Theory and Application of Biomicrofluidics Miniaturization."

Dr. Chakraborty is the recipient of many prior honors and awards, including the Infosys Prize in engineering and computer science, the Institution of Engineers India-NMLC FCRIT Excellence Award, and the Indian National Academy of Engineering Outstanding Teacher Award. His current areas of research include microfluidics, nanofluidics, and micro-nano scale transport, with particular focus on biomedical applications including medical diagnostic technology for affordable healthcare. He is an author or co-author on over 500 journal publications. In 2021, he was elected Fellow of the Asian Union or Thermal Science and Engineering.

Y. C. Fung Early Career Award

ADRIAN BUGANZA TEPOLE

The Y.C. Fung Young Investigator Award was established by the Bioengineering Division in 1985, elevated to a Society award in 1998, and renamed in 2017. The award recognizes an individual who is committed to pursuing research in bioengineering and has demonstrated significant potential to make substantial contributions to the field.

Adrian Buganza Tepole, Ph.D., associate professor of mechanical and biomedical engineering at Purdue University, is honored for contributions to experimental characterization and modeling of skin mechanics and mechanobiology, innovation in computational methods to link tissue growth and remodeling with cell signaling networks, and the development of novel data-driven and probabilistic modeling frameworks for living tissue.

Dr. Tepole's lab at Purdue has been awarded grants from the National Science Foundation, the National Institutes of Health, and multiple industry entities. Dr. Tepole has received multiple individual honors as well, including the Miller visiting professorship at the University of California – Berkeley, a Stanford graduate fellowship, and the Claudio X. Gonzalez Fellowship.

Gas Turbine Award

MICHAEL CASEY
CHRIS ROBINSON


The Gas Turbine Award, established in 1963, recognizes outstanding contributions to the literature of combustion gas turbines or gas turbines thermally combined with nuclear or steam power plants. The award is sponsored by the ASME International Gas Turbine Institute.

Michael Casey, D.Phil., consultant at PCA Engineers Limited, and Chris Robinson, Ph.D., director at PCA Engineers Limited, are recognized for the paper titled "Some Properties of the Exit Velocity Triangle of a Radial Compressor Impeller."

Dr. Casey is an author on over 150 technical papers and has been awarded the IGTI Best Paper Award three times. Previously, he served as professor of thermal turbomachinery at Stuttgart University. He was named a Fellow of ASME in 2010.

Dr. Robinson joined PCA in 1994 and previously served as engineering director and managing director. He is a prior awardee of the IGTI Best Paper Award. With Dr. Casey, he is the co-author of *Radial Flow Turbocompressors*.

Kate Gleason Award

PATRICIA BRACKIN

Established in 2011 by the ASME Foundation, the Kate Gleason Award recognizes the contribution of distinguished female leaders in the engineering profession. The Gleason Award seeks to honor an individual female engineer who is a highly successful entrepreneur in a field of engineering or someone who had a lifetime of achievement in the engineering profession.

Patricia Brackin, Ph.D., director of engineering design and professor of mechanical engineering at the Rose-Hulman Institute of Technology, is recognized for outstanding contributions to undergraduate engineering education, development of design program curricula, and leadership in engineering accreditation.

Dr. Brackin is a recipient of many prior honors and awards. She has been named Fellow of both ASME and ABET and is the prior awardee of the American Society of Engineering Education Best Paper Award and the ASME Outstanding Student Section Advisor Award. She remains active in ASME and is currently ABET team chair and a member of the engineering accreditation commission.

Melvin R. Green Codes and Standards Medal

JAY CAMERON

The Melvin R. Green Codes and Standards Medal was established in 1976 as the Codes and Standards Medal and renamed in 1996 to honor the memory and extraordinary contributions of an ardent supporter of industrial standards.

Jay Cameron, principal engineer at Hartford Steam Boiler (HSB), is recognized for extraordinary contributions to public safety, advancements to technology within the ASME boiler and pressure vessel codes, and leadership and mentoring for early career engineers.

With HSB since 1992, Mr. Cameron has provided indispensable technical assistance for non-nuclear ASME Boiler and Pressure Vessel Codes and the National Board Inspection Code. He currently serves as a member of multiple BPV committees and has presented courses on pressure vessel design and materials to audiences around the world. Prior to joining HSB, Mr. Cameron worked in the aerospace gas turbine and oilfield exploration equipment industries. As ASME Fellow, he is the recipient of several prior awards, including the ASME BPV II Gold Standard Award.

Edward Grood Interdisciplinary Team Science Medal in Bioengineering

THE DASI SIMULATION TEAM

The Edward Grood Interdisciplinary Team Science Medal in Bioengineering, established in 2022, recognizes a team of scientists and engineers who have collaboratively carried out impactful interdisciplinary science and engineering research in the bioengineering field.

The Dasi Simulation Team are honored for impactful interdisciplinary research in developing and translating AI-based predictive models that use fluid and tissue biomechanics data to help optimize structural heart interventions such as trans-catheter aortic valve replacement (TAVR).

The Dasi Simulation Team is led by Lakshmi Prasad Dasi, Ph.D., Rozelle Vanda Wesley professor of biomedical engineering at the Georgia Institute of Technology. Past and present team members include Atefeh Razavi, Ph.D.; Fateme Esmailie, Ph.D.; Huang Chen, Ph.D.; Hoda Hatoum, Ph.D.; Breandan Yeats, Ph.D.; Shelley Gooden, Ph.D.; Imran Shah; Taylor Nicole Sirset-Becker; Sri Krishna Sivakumar, Ph.D.; Beom Jun Lee; Courtney Ream; Dr. Pradeep Yadav, M.D.; Vinod Thourani, M.D.; Aniket Venkatesh; Alessandro Veneziani; Venkat Polsani, M.D.; Milad Samaee, Ph.D.; Mani Vannan, M.D.; and Scott Lilly, M.D., Ph.D.

Heat Transfer Memorial Awards

The Heat Transfer Memorial Award, established in 1959 by the Heat Transfer Division and elevated to a Society award in 1974, recognizes outstanding contributions to the field through teaching, research, practice, and/or design.

General

MILIND A. JOG

Milind A. Jog, Ph.D., professor of mechanical engineering at the University of Cincinnati, is recognized for impactful leadership and service to the heat transfer community by serving as editor of multiple journals, organizing conferences, strengthening international collaborations, and advancing new initiatives through technical committees.

In addition to his professorship, Dr. Jog concurrently serves as associate head of the department of mechanical and materials engineering at Cincinnati. He is a renowned expert in computational heat transfer, interfacial phenomena, atomization, and two-phase flow. He is co-author of the textbook *Advanced Thermodynamics Engineering* and has received research funding of over $12 million from government agencies including the NSF, NIH, DOE, ARPA-E, NIOSH, AFRL, NRC, and NASA, and industry leaders such as GE, Parker Hannifin, and P&G.

Science

JOHN C. BISCHOF

John C. Bischof, Ph.D., Medtronic-Bakken endowed chair, distinguished McKnight university professor in mechanical and biomedical engineering, and inaugural Carl and Janet Kuhrmeyer chair in mechanical engineering at the University of Minnesota, is honored for the invention of transformative heat-transfer-based technologies supporting cryopreservation of organs, organoids, and organisms; for improvements to infectious disease diagnostics and focal cancer therapy; for outstanding leadership of institutes, centers, and scientific societies; and for translation of intellectual property for societal good.

Dr. Bischof's primary research is in cryobiology and hyper-thermic biology for therapeutics, regenerative medicine, and diagnostics. He is well-regarded for his contributions to the areas of cryosurgery, thermal, and other focal therapies for the treatment of cancer and cardiovascular disease. He has also contributed numerous strategies and methods for organ, tissue, and gamete preservation technology and biothermal property measurements.

Art

SRINIVAS GARIMELLA

Srinivas Garimella, Ph.D., Hightower chair and professor of engineering at the Georgia Institute of Technology, is honored for lasting contributions to the understanding and application of micro-scale phase change heat and mass transfer, and for the development of innovative thermal systems for space-conditioning, energy storage, nuclear thermal hydraulics, carbon capture, waterless power plant cooling, and water purification.

Prior to joining Georgia Tech, Dr. Garimella held positions as a research scientist at Battelle Memorial Institute, senior engineer at General Motors, and associate professor at both Western Michigan and Iowa State University. He is an expert in microscale phase-change heat and mass transfer, sustainable thermal systems, nuclear thermal-hydraulics, thermal and electrochemical energy storage, waste heat recovery, water conservation and purification, and decarbonization. His research has produced hundreds of journal and conference publications and books on heat transfer, condensation heat transfer, and adsorption heat pumps. He holds seventeen patents.

Mayo D. Hersey Award

Q. JANE WANG

The Mayo D. Hersey Award, established in 1965, is bestowed for distinguished and continued contributions to the advancement of the science and engineering of tribology. Contributions may result from original research in one of the many scientific disciplines related to lubrication.

Q. Jane Wang, Ph.D., Joseph Cum-

mings professor in mechanical engineering at Northwestern University, is recognized for exemplary work on FFT-based computational contact mechanics and multifield contact modeling, and for innovative integration of contact-lubrication simulations with novel tribological surfaces, interfaces, lubricants, and additives.

Dr. Wang's research areas include mechanotribology, interfacial mechanics of solid-state batteries, multifield contact and interfacial mechanics, multifield lubrication, novel lubricants and lubrication technologies, and industrial applications of models, surface designs, and novel lubricants for friction reduction, lubrication enhancement, and failure prevention. Her work is these areas has led to several prior honors, including multiple best paper awards from the *Journal of Tribology* and membership to the National Academy of Engineering.

Henry Hess Early Career Publication Award

ELEONORA TUBALDI
MICHAEL R. BONTHRON


The Henry Hess Early Career Publication Award is given for best original technical paper presented to or published by the Society during the two calendar years prior to the year of award. The award was established in 1914 by Henry Hess, Member and Vice President of the Society. In 2016, the name was changed to the Henry Hess Early Career Publication Award.

Eleonora Tubaldi, Ph.D., assistant professor at the University of Maryland, and Michael R. Bonthron, doctoral student at the University of Maryland, are recognized for the paper titled "Dynamic Behavior of Bistable Shallow Arches: From Intrawell to Chaotic Motion."

Dr. Tubaldi's research uses a combination of theoretical, numerical, and experimental methods to study complex systems at the interface of nonlinear dynamics, soft materials, and fluid-structure interactions. She is a recipient of the 2023 NSF CAREER Award and the 2020 Haythornthwaite Young Investigator Award from the ASME Applied Mechanics Division.

Mr. Bonthron is the prior awardee of the National Defense Science and Engineering Graduate Fellowship. Prior to Maryland, he attended DePaul University for a master's in applied mathematics and Illinois Institute of Technology for a bachelor's in mechanical engineering.

Soichiro Honda Medal

HONGTEI ERIC TSENG

The Soichiro Honda Medal, established in 1983, recognizes an individual for an outstanding achievement or a series of significant contributions to engineering improvements in the field of personal transportation.

Hongtei Eric Tseng, Ph.D., distinguished university professor at The University of Texas at Arlington, is honored for contributions to automotive computer controls, estimation, and fault detection, resulting in improved safety and performance of millions of vehicles worldwide.

Dr. Tseng joined the University of Texas system in 2024 after a three-decade career at the Ford Motor Company. At Ford, he made many significant contributions to areas such as vehicle state estimation and fault detection and advanced modeling and control strategy for fast skip-downshift on Ford F150 10R transmissions. In 2022, his achievements at Ford had him named a member of the National Academy of Engineering. He was previously a seven-time awardee of the Henry Ford Technology Award.

Internal Combustion Engine Award

ZORAN S. FILIPI

The Internal Combustion Engine Award, established in 1966, is given in recognition of eminent achievement or distinguished contributions over a substantial period of time that have advanced the art of engineering in the field.

Zoran S. Filipi, Ph.D., Timken endowed chair and professor of engineering at Clemson University, is recognized for pioneering research on the use of thermal barrier coatings to control heat transfer in homogenous charge compression ignition engines, innovative methodologies for model-based control, and engine-in-the-loop integration for real-world investigations of efficiency and emissions.

In addition to his well-regarded research contributions, Dr. Filipi is active in multiple professional societies, serving as a journal editor and lead organizer of technical conferences and symposiums. He is a Fellow of both ASME and the Society of Automotive Engineers and the recipient of multiple prior awards, including the International *Journal of Automobile Engineering* Best Paper Award.

Johnson & Johnson Consumer Companies, Inc. Medal

SRIRAM SUNDARARAJAN

The Johnson & Johnson Consumer Companies, Inc. Medal, established in 2004, recognizes outstanding contributions by an individual, company, government entity, school, or other organization toward developing and implementing practices, processes, and programs that value and strategically manage diversity and inclusiveness.

Sriram Sundararajan, Ph.D., associate dean for academic affairs and professor of mechanical engineering at Iowa State University, is honored for establishing a college award to recognize faculty and staff for DEI efforts, delivering unconscious bias training to various committees, implementing learning outcomes related to inclusion, and presenting many papers, lectures, and workshops on the subject.

An expert in the areas of multiscale tribology and engineering education, Dr. Sundararajan has published over 100 articles in peer-reviewed journals and conference proceedings, created undergraduate and graduate courses in mechanical engineering and leadership development, and developed pipeline programs from a diverse set of institutions.

Duane P. Jordan Early Career Award

SHREYAS HEGDE

The Duane P. Jordan Early Career Award is aimed at furthering the goal of the Old Guard to help the young engineer bridge the gap between college and professional life.

Shreyas Hedge, Ph.D., senior engineer at Pratt & Whitney, RTX, is honored for outstanding growth as an engineer through educational and professional accomplishments, and for significant and ongoing volunteer contributions to ASME and the engineering community.

Dr. Shreyas has demonstrated expertise in next generation aircraft technologies, including airfoil design and structures for fan and compressor modules. He currently works in the compressor system aerodynamics group at Pratt & Whitney, helping design groundbreaking technologies for next generation aircraft engines. As a graduate student, he was a recipient of the ASME Foundation Scholarship and multiple Elisabeth M. and Winchell M. Parsons Scholarships from ASME. He continues to contribute to ASME by being actively involved in the International Gas Turbine Institute, Early-Career Engineer Programming Committee, and the Hartford Section.

Warner T. Koiter Medal

H. JERRY QI

The Warner T. Koiter Medal was established in 1996 to recognize distinguished contributions to the field of solid mechanics with special consideration to the effective blending of theoretical and applied elements and to leadership in the international solid mechanics community. The medal honors the late Dr. Koiter, world-renowned authority in the field.

H. Jerry Qi, professor of mechanical engineering at the Georgia Institute of Technology, is honored for significant contributions to nonlinear mechanics and the multiphysics behavior of active polymers through experimentation and theoretical modeling, and for pioneering work in the emerging field of 4D printing.

Dr. Qi's research focuses on understanding the multi-field properties of soft active materials through experimentation and constitutive modeling with particular applications to design. He is currently working on a range of soft active materials—including shape memory polymers, light activated polymers, covalent adaptable network polymers—and most recently has engaged in research to integrate soft active materials into 3D and 4D printing.

Robert E. Koski Medal

ANDREW PLUMMER

The Robert E. Koski Medal recognizes an individual who has advanced the art and practice of fluid power motion and control through education and/or innovation. It was established in 2007 by the Fluid Power Systems and Technology Division to honor Mr. Koski's contributions to the fields of design engineering and dynamic systems and control.

Andrew Plummer, Ph.D., professor of machine systems at the University of Bath, is honored for outstanding contributions to fluid power and motion control research and education, particularly in the field of servohydraulic systems, and for leadership in the global fluid power research community.

Since joining Bath in 2006, Dr. Plummer has led research into novel hydraulic valve configurations, hybrid piezoelectric-hydraulic actuation, additive manufacture for hydraulic components, model-based control, and

energy-efficient hydraulics, including applications in aerospace, renewable energy, and biomechatronics. Currently, he is pursuing research into new control system architectures and valve design for aircraft hydrogen fuel systems. He is a Fellow of both the Institution of Mechanical Engineers and the Higher Education Academy in the UK.

Allan Kraus Thermal Management Medal

SUSHIL H. BHAVNANI

The Allan Kraus Thermal Management Medal was established in 2009 to recognize an individual who has demonstrated outstanding achievements in thermal management of electronic systems and their commitment to the field of thermal science and engineering.

Sushil H. Bhavnani, Ph.D., Henry M. Burt Jr. professor emeritus at Auburn University and microsystems integration advisor with ECS Tech, is recognized for pioneering contributions to the science and technology of phase change heat transfer enhancement using micro-structured surfaces, sustained leadership and service to the thermal management community, and innovation in curriculum development.

Dr. Bhavnani is the recipient of many prior honors, including the Clock Award from the ASME Electronics and Photonics Packaging Division and the Career Service Award from the IEEE-Intersociety Conference on Thermal and Thermomechanical Phenomena in Electronics Systems. He has authored 180 refereed journal and conference publications resulting from research sponsored by NASA, the National Science Foundation, Southern Company, the U. S. Department of Energy, and the U. S. Department of Defense.

Frank Kreith Energy Award

S. A. SHERIF

The Frank Kreith Energy Award was established in 2005 to honor an individual for significant contributions to a secure energy future with particular emphasis on innovations in conservation and/or renewable energy. Contributions may be through research, education, practice or significant service to society that will lead to a sustainable energy future.

S. A. Sherif, Ph.D., professor of mechanical and aerospace engineering at the University of Florida, is honored for significant contributions to research in thermodynamic and heat transfer analysis and optimization of a wide variety of energy systems.

In addition to his faculty position, Dr. Sherif currently serves as the founding director of the Wayne K. and Lyla L. Masur HVAC Laboratory, the director of the UF-DOE Industrial Assessment Center, and the Director of the Mobile Energy Laboratory at the University of Florida. He currently serves as editor-in-chief of the ASME *Journal of Solar Energy Engineering* and was previously editor-in-chief of the *Journal of Thermal Science and Engineering Applications*.

James N. Landis Medal

JAMES M. WIETERS

Established in 1977, the James N. Landis Medal is presented for outstanding personal performance in the design, construction, or management of major steam-electric stations using nuclear or fossil fuels.

James M. Wieters, principle technical leader at the Electric Power Research Institute (EPRI), is recognized for outstanding technical leadership to the power industry; for technical support in all phases of engineering, construction, operations and maintenance in the fossil and nuclear fields for the South Carolina Electric and Gas Company; and for significant and ongoing leadership at the EPRI.

Mr. Wieters is a recognized expert with nearly five decades of experience in engineering, operations, outage management, and construction for fossil, nuclear, and combined cycle generation. Acting as a mentor to the next generation of experts in the field, he provides technical direction on power plant construction, repowering, power uprate, major modification, and life extension.

Bernard F. Langer Nuclear Codes and Standards Award

TING-LEUNG "SAM" SHAM

The Bernard F. Langer Nuclear Codes and Standards Award was established in 1977 and is presented to an individual who has contributed to the nuclear power plant industry through the development and promotion of ASME nuclear codes and standards or the ASME Nuclear Certification Program.

Ting-Leung "Sam" Sham, Ph.D., senior technical advisor for advanced reactor research at the U.S. Nuclear Regulatory Commission, is honored for significant technical input to ASME standards through experimental laboratory work in the area of high-temperature material properties for use in advanced nuclear power reactors and related applications.

Prior to his tenure at the U.S. Nuclear Regulatory Commission, Dr. Sham held various positions at the Idaho National Laboratory, the Argonne National Laboratory, the Oak Ridge National Laboratory, the Knolls Atomic Power Laboratory, and Rensselaer Polytechnic Institute. He is the recent awardee of the Secretary of Energy Achievement Award and the ASME BPV III Outstanding Service Medal. He was elected ASME Fellow in 2000.

Wilfred C. LaRochelle Conformity Assessment Medal

DAVID E. TUTTLE

The Wilfred C. LaRochelle Conformity Assessment Award, established in 2017, recognizes distinguished service in the area of conformity assessment, including the establishment, advancement and promotion of the Society's product & personnel certification and accreditation programs.

David E. Tuttle, mechanical engineer and consultant, is recognized for exemplary service in conformity assessment in the establishment, advancement, and promotion of ASME certification and accreditation programs; and for outstanding performance, demonstrated leadership, and committed service as a member and officer of multiple technical and conformity assessment committees.

An ASME Fellow with nearly five decades of experience in codes and standards and over 20 years on ASME committees, including the Council of Standards and Certification and the Board of Conformity Assessment, Mr. Tuttle is a well-regarded expert in codes and standards, especially in the area of pressure relief devices. In addition to his committee service, he has held many positions with several industry leaders, including senior consulting engineer at Emerson Automation Solutions and quality assurance manager at Anderson Greenwood Crosby.

Gustus L. Larson Memorial Award

SINAN KETEN

The Gustus L. Larson Memorial Award was established in 1974 to honor Gustus L. Larson, Fellow and founder of Pi Tau Sigma. It is awarded to the engineering graduate who has demonstrated outstanding achievement in mechanical engineering within 10 to 20 years following receipt of their bachelor's degree.

Sinan Keten, Ph.D., Jerome Cohen professor of civil and environmental engineering at Northwestern University, is recognized for outstanding achievements in mechanical engineering within 10 to 20 years following graduation.

Dr. Keten is a noted expert in computational materials design and mechanics, especially with soft matter. He is the author or co-author of 150 journal articles, has delivered over 100 invited talks about his research, and is the prior awardee of the Presidential Early Career Award for Scientists and Engineers, the Office of Naval Research Young Investigator Program Award, the Society of Engineering Science Young Investigator Medal, the ASME Sia Nemat-Nasser Early Career Award, the ASME Thomas J.R. Hughes Young Investigator Award, and the ASCE Huber Prize.

H. R. Lissner Medal

MARJOLEIN C.H. VAN DER MEULEN

The H.R. Lissner Medal, established by the Bioengineering Division in 1977 and elevated to a Society award in 1987, recognizes outstanding achievements in the field of bioengineering.

Marjolein C.H. van der Meulen, Ph.D., James M. & Marsha McCormick director and Swanson professor of biomedical engineering at Cornell University, is recognized for pioneering contributions in musculoskeletal mechanobiology and orthopedic biomechanics, particularly in vivo models of skeletal adaptation to mechanical stimuli; for international leadership in orthopedic bioengineering; and for commitment to advancing women in engineering and STEM.

Before joining Cornell, Dr. van der Meulen was a biomedical engineer at the Palo Alto VA Medical Center. She is the recipient of several prior honors, including the NIH FIRST Award, the NSF Faculty Early Career Development Award, the Adele L. Boskey Award from the American Society for Bone and Mineral Research, and the Women's Leadership Award from the Orthopaedic Research Society. She is a Fellow of several engineering organizations, including the International Combined Orthopaedic Research Societies and the Biomedical Engineering Society.

Charles T. Main Student Leadership Award - Silver

RYTHIN VARGHESE

The Charles T. Main Award was established in 1919 to recognize, at the Society level, an undergraduate ASME student member whose leadership and service qualities have contributed, for a period of more than one year, to the program and operation of a Student Section. In 1983, a second-place award was added.

Rythin Varghese, engineering student at the Federal Institute of Science and Technology – Kerala, India, is recognized for outstanding leadership as chair of the ASME Federal Institute of Science and Technology Student Section and the development of transformative initiatives, building multiple partnerships between academia and industry and promoting student involvement in engineering societies.

Mr. Varghese is currently an intern at Evaprov Cooling Towers Private Limited. Previously, he worked as a project intern at Treetag Private Limited, where he contributed to geotagging and nurturing trees. Mr. Varghese currently serves as the chairperson of ASME FISAT and is a prior awardee of the ASME Nuclear Engineering Division Scholarship.

McDonald Mentoring Award

XIULIN RUAN

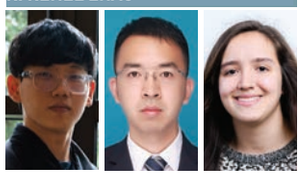
The McDonald Mentoring Award, established in 2007, recognizes the outstanding mentoring of other professionals by an engineer in industry, government, education or private practice.

Xiulin Ruan, Ph.D., professor of engineering at Purdue University, is honored for leadership in sustainable energy and nanoscale transport research and for serving as a role model for diverse, inclusive, and effective mentoring.

Dr. Ruan's research and teaching interests are in predictive simulations, scalable manufacturing, and multiscale characterizations of thermal transport materials and systems. He has developed the general theory and computational method of four-phonon scattering, created several simulation methods, and invented ultrawhite radiative cooling paints. He is also the recipient of several prior honors, including the NSF CAREER Award, the ASME Heat Transfer Division Best Paper Award, and the South by Southwest (SXSW) Innovation Award for Sustainability. He previously served as an associate editor for ASME *Journal of Heat and Mass Transfer.*

Melville Medal

JIZE DAI
LU LU
SOPHIE LEANZA
JOHN W. HUTCHINSON
R. RENEE ZHAO



The Melville Medal is the highest ASME honor for the best original paper (not published elsewhere) published in the ASME *Transactions* during the two calendar years immediately preceding the year of the award.

Jize Dai, Lu Lu, Ph.D., Sophie Leanza, John W. Hutchinson, Ph.D., and R. Renee Zhao, Ph.D., are recognized for the paper titled "Curved Ring Origami: Bistable Elastic Folding for Magic Pattern Reconfigurations."

Mr. Dai is a first-year Ph.D. student at Stanford. His research agenda is currently focused on 3D printing and reconfigurable structures.

A postdoctoral researcher in the department of mechanical engineering at Stanford University, Dr. Lu's research currently focuses on focuses on the mechanics of deployable structures and stability of slender structures. He is a previous awardee of the Boya postdoctoral Fellowship at Peking University.

A research assistant at Stanford and NSF graduate research Fellowship awardee, Ms. Leanza currently researches shape reconfigurable structures and soft robotics.

Dr. Hutchinson is currently James Lawrence professor of engineering emeritus at Harvard University. He and his collaborators work on problems in solid mechanics concerned with engineering materials and structures. His current projects include efforts to extend plasticity theory to small scales and the instabilities in soft materials and shell structures.

Dr. Zhao is currently an assistant professor of mechanical engineering at Stanford University. Her research focuses on the development of stimuli-responsive soft composites for multifunctional robotic systems with integrated shape-changing, assembling, sensing, and navigation.

M. Eugene Merchant Manufacturing Medal of ASME/SME

ROBERT CARON

The M. Eugene Merchant Manufacturing Medal was established in 1986 by ASME and SME to honor an exceptional individual who has had significant influence and responsibility for improving the productivity and efficiency of the manufacturing operation.

Robert Caron, president and CEO of Caron Engineering, Inc., is recognized for sustained innovations in machine tool technology, including advancements in tool monitoring and adaptive control techniques, automatic tool offset control, and the implementation of RFID technology in machine tools.

As CEO, Mr. Caron has spearheaded the development of a comprehensive suite of manufacturing solutions for tool monitoring, automation, and process control that drastically reduce setup and cycle times, minimize operator errors through automation, and furnish data for advanced process analysis. He is a prior winner of the Maine Governor's Award for Business Excellence and the York County Small Business Award. Mr. Caron is active in civic work, serving on the boards of both the American Precision Museum and the Sanford Regional Technical Center.

Van C. Mow Medal

THAO D. NGUYEN

The Van C. Mow Medal was established by the ASME Bioengineering Division in 2004 and is presented for significant contributions to the field of bioengineering through research, education, professional development, leadership in the development of the profession, mentoring of young bioengineers, and service to the bioengineering community.

Thao D. Nguyen, Ph.D., professor of mechanical engineering and Marlin U. Zimmerman faculty scholar at Johns Hopkins University, is honored for rigorous theoretical, computational, and experimental work that has transformed our understanding of ocular mechanics and glaucoma, for exemplary mentorship of bioengineering trainees, and for energetic leadership through service to ASME and the bioengineering division.

Dr. Nguyen's research encompasses the biomechanics of soft tissues and the mechanics of active polymers and biomaterials. She is the recipient of several prior awards, including the ASME Sia Nemat-Nasser Early Career Award and the Thomas J.R. Hughes Young Investigator Award. She was elected Fellow of ASME in 2022 and AIMBE in 2023.

Nadai Medal

JULIA R. GREER

The Nadai Medal was established in 1975 to recognize significant contributions and outstanding achievements that broaden the field of materials engineering.

Julia R. Greer, Ph.D., Ruben F. and Donna Mettler professor of materials science, mechanics, and medical engineering at the California Institute of Technology, is honored for visionary leadership in pioneering the development of 3D nano- and micro-architected materials, inspiring subsequent generations of scientists and engineers in the field of materials by design.

A recipient of many recent honors, Dr. Greer's research focuses on creating and characterizing nano- and micro-architected materials with multi-scale microstructural hierarchy and investigating their mechanical, electrochemical, chemo-mechanical, and photonic properties as a function of architecture, constituent materials, and microstructural detail. Dr. Greer is an author or co-author on over 170 publications and has delivered over 100 invited lectures. In addition to her professorship, she is the current Fletcher Foundation director of the Kavli Nanoscience Institute and editor-in-chief of the *Journal of Applied Physics*. In 2023, she was named Fellow of the International Association of Advanced Materials.

Sia Nemat-Nasser Early Career Award

R. RENEE ZHAO

The Sia Nemat-Nasser Early Career Award recognizes research excellence in experimental, computational, or theoretical aspects of mechanics of materials by an individual within 10 years following receipt of their Ph.D. degree. Established by the Materials Division in 2008, it was elevated to a Society award in 2012.

R. Renee Zhao, Ph.D., assistant professor of mechanical engineering at Stanford University, is recognized for exceptional contributions to the study of the fundamental mechanics of soft active materials and for developing mechanics-guided design of actuation mechanisms and applications in soft robotics, active mechanical metamaterials, origami, and biomedical devices.

Dr. Zhao's research focuses on the development of stimuli-responsive

soft composites for multifunctional robotic systems with integrated shape-changing, assembling, sensing, and navigation. She is the recipient of many previous honors, having been named a Kavli Fellow by the National Academy of Sciences and one of *MIT Technology Review*'s "35 Innovators Under 35." She has been awarded the AFOSR Young Investigator Program Award, the Eshelby Mechanics Award for Young Faculty, and the ASME Henry Hess Early Career Publication Award, among others.

Robert M. Nerem Education and Mentorship Medal

JAMES E. MOORE JR.

The Robert M. Nerem Education and Mentorship Medal, established by the Bioengineering Division in 2017, recognizes an individual who has demonstrated a sustained level of outstanding achievement in education and mentoring of trainees.

James E. Moore Jr., Ph.D., professor and Bagrit chair in medical device design at Imperial College London, is recognized for the successful education and mentorship of more than 100 students and postdocs, and for work in establishing medical device entrepreneurship as a field in the UK.

Professor Moore's research interests include cardiovascular biomechanics, lymphatic biomechanics and medical device entrepreneurship. He holds 13 patents for medical devices and testing equipment, has co-founded four start-ups, and is currently developing two technologies for preventing and resolving secondary lymphoedema, which typically forms subsequent to cancer surgery. He is a recent first-prize winner and runner-up at the Siemens external Innovation Think Tank Exhibition and has been awarded the BMES *Cardiovascular Engineering and Technology* Most Cited Article Award.

Burt L. Newkirk Award

BRANDON KRICK

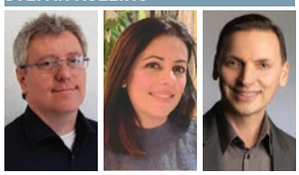
The Burt L. Newkirk Award was established in 1976 and is presented to an individual who has made a notable contribution in tribology research or development, as evidenced by important tribology publications prior to their 40th birthday.

Brandon Krick, Ph.D., associate professor of mechanical engineering at Florida Agricultural and Mechanical University, is recognized for experimental research and instrument development resulting in the discovery of multi-scale mechanical and tribochemical processes central to many tribological interfaces, and for enhancing the understanding of ultralow wear PTFE composites and other solid lubricant materials.

Dr. Krick's research interests are in materials tribology and the origins of friction, wear, materials deformation, and adhesion on complex surfaces ranging from tissues to nanocomposites. He has performed materials experiments on the international space station, evaluating wear of dinosaur dental fossils and developing and patenting ultra-low wear polymer composites. He is a recent recipient of the Ken Ludema Wear of Materials Best Paper Award, the Libsch Early Career Research Award, and the NSF CAREER Award, among others.

Edward F. Obert Award

MARIAN BULLA
ELHAM SAHRAEI
STEFAN KOLLING



The Edward F. Obert Award was established in 1987 by the Advanced Energy Systems Division to recognize an outstanding paper on thermodynamics. It was elevated to a Society award in 1996.

Marian Bulla, Elham Sahraei, Ph.D., and Stefan Kolling, Dr.-Ing, are recognized for the paper titled "An Experimental and Computational Study of Mechanically and Dynamically High Loaded Separators for Lithium-Ion Batteries."

Mr. Bulla is currently director at ALTAIR Engineering. Prior to his directorship, Mr. Bulla was program manager of material data at ALTAIR and research Fellow at MIT. He is an author or co-author of numerous publications in venues such as the SAE International *Journal of Transportation Safety*, the *Journal of Energy Storage*, and *Polymers*.

Dr. Sahraei currently serves as associate professor at Temple University and director of the Electric Vehicle Safety Lab at Temple. Her research focuses on mechanical safety of lithium-ion batteries under extreme loading conditions. Prior to joining Temple, Dr. Sahraei was a researcher at the Impact and Crashworthiness Lab at the Massachusetts Institute of Technology and the co-director of the MIT Battery Consortium.

Dr. Kolling is currently professor of mathematics at THM University of Applied Sciences. Previously, he worked as an engineer for vehicle development at Daimler in Germany, where he specialized in crash simulation and the development of material models for glass and plastics.

Rufus Oldenburger Medal

PETROS A. IOANNOU

The Rufus Oldenburger Medal was established in 1968 and is given in recognition of significant contributions and outstanding achievement in the field of automatic control.

Petros A. Ioannou, Ph.D., university professor and A.V. "Bal" Balakrishnan chair of electrical and computer engineering at the University of Southern California, is recognized for fundamental contributions to robust adaptive control, vehicle control, and intelligent transportation systems; for leadership in academia; and for innovation in connecting research to industry.

In addition to his professorship, Dr. Ioannou is the founder and Director of the Center of Advanced Transportation Technologies and Associate Director for research for the Pacific Southwest Region Transportation Center. A renowned expert on vehicle control, safety, and automation, he was one of the first designers of adaptive cruise control systems, which he successfully implemented on vehicles in the early 1990s. Dr. Ioannou is an author or co-author of over 400 publications, including nine books.

Performance Test Codes Medal

TERRY SULLIVAN

The Performance Test Codes Medal, established in 1981, is awarded for outstanding contributions to the development and promotion of ASME Performance Test Codes, including the supplements on instruments and apparatus.

Terry Sullivan, engineer at Siemen Energy, Inc., is honored for outstanding and continuous leadership, achievements, and contributions to ASME performance test codes, and related work for over 20 years, notably in the areas of gas turbine inlet air-conditioning equipment and overall plant performance testing.

An expert in thermodynamic and gas turbine design engineering, Mr. Sullivan has three decades of experience in performance test codes. He has served long tenures on the PTC 51 Committee on Gas Turbine Inlet Air-Conditioning Equipment and the PTC 46 Committee on Overall Plant Performance Testing, and his pioneering work in these areas has been replicated across multiple codes today. At Siemens Energy, Mr. Sullivan currently focuses on new engine design, field verification of hardware, and service phase mod and upgrade technical development.

Marshall B. Peterson Award

TOMAS F. BABUSKA

The Marshall B. Peterson Award, established by the Research Committee on Tribology and the Tribology Division in 1997, is given in recognition of a young engineer in research as demonstrated by papers published in scientific journals of ASME and promise for pursuit of research in tribology.

Tomas F. Babuska, Ph.D., postdoctoral researcher at Sandia National Laboratories, is recognized for new insights on the origins of friction, wear, and tribochemical pathways of 2D solid lubricant and nanocrystalline coatings through the development of process-structure-property relationships resulting in novel aging-tolerant, functionally-graded coating morphologies for aerospace and defense applications.

A recent Ph.D. graduate, Dr. Babuska has been awarded several previous honors in recent years, including the Society of Tribologists and Lubrication Engineers Klaus Achievement Scholarship, the Philadelphia Section Award for exceptional student work in tribology, and the Early Career Graduate Student Award for graduate students excelling in tribology.

Pi Tau Sigma Medal

RAUDEL AVILA

The Pi Tau Sigma Gold Medal recognizes outstanding achievement in mechanical engineering within ten years following graduation with a bachelor's degree in mechanical engineering or related field.

Raudel Avila, Ph.D., assistant professor of mechanical engineering at Rice University, is recognized for outstanding achievements in mechanical engineering within ten years of graduation.

Dr. Avila currently leads the computational mechanics and bioelectromagnetics lab at Rice, where he works on mechanics, materials, and multiphysics modeling and simulation of bioelectronics for health care and biomedical applications. His research laboratory aims to develop a theoretical and computational framework to study materials, scalability, packaging, power limitations, tissue interactions and energy absorption in bioelectronic devices. Dr. Avila is a well-regarded researcher, having been published in many high-profile journals such as *Science*, *Nature*, *Nature Biotechnology*, the *Journal of the Mechanics and Physics of Solids*, and the *Journal of Applied Mechanics*, among others. He is a prior awardee of

a Haythornthwaite Foundation research initiation grant.

James Harry Potter Gold Medal

EFSTATHIOS E. MICHAELIDES

The James Harry Potter Gold Medal recognizes eminent achievement or distinguished service in the science of thermodynamics and its application in mechanical engineering. The basis of the award shall include contributions involving the teaching, appreciation, or utilization of thermodynamic principles in research, development, and design in mechanical engineering. The award was established in 1980 in honor of James H. Potter.

Efstathios E. Michaelides, Ph.D., W. A. Tex Moncrief chair of engineering at Texas Christian University, is honored for pioneering contributions in thermodynamics that have led to advances in geothermal energy, numerical methods, energy transition, and applications of the exergy concept; and for advancing thermodynamics research in education and publishing.

A prior awardee of the ASME Freeman Scholar Award, Fluids Engineering Award, and Edwin F. Church Medal, Dr. Michaelides has authored over 180 journal articles, 300 publications, and seven books. Among his ongoing contributions to the field are current positions as editor of the Mechanical and Aerospace Engineering series from CRC Press, editor of the *Multiphase Flow Handbook* from CRC Press, and editor of the *Journal of Non-Equilibrium Thermodynamics*.

Prime Movers Committee Award

JOSEPH EARNEST ALEXANDER ROY-AIKINS
GARY DE KLERK
DUDUZILE RAMASIMONG
KUMAR RUPNARAIN

Established by the Edison Electric Institute in 1954, the Prime Movers Committee Award recognizes outstanding contributions to the literature of thermal electric station practice or equipment which are available through public presentation and publication.

Joseph Earnest Alexander Roy-Aikins, Ph.D., Gary de Klerk, Ph.D., Duduzile Ramasimong, and Kumar Rupnaran are honored for the paper titled "Managing Risks Associated With Turbine First Steam Admission Following Inadequate Boiler Cleaning."

Recently retired, Dr. Roy-Aikins joined Eskom Holdings in 2006 as chief engineer of the power plant department. In that role, he worked in Eskom's new build program, leading work on the Medupi and Kusile coal power projects, the Sere wind project, and the solar SCP project.

Previously serving as chief engineer at Eskom, Dr. de Klerk is currently a technical manager at a 100MW CSP facility at Kathu Solar Park (RF) Pty, Ltd. He is also an author on several technical papers.

Mrs. Ramasimong has over 20 years' experience in power plant technology, including development, operation monitoring and end-of-life solutions. Her current responsibilities as corporate specialist for turbines at Eskom include turbine centerline fleet-wide technical plant management and oversight.

Mr. Rupnaran has been a design leader at Eskom for the last 25 years, spearheading the development of boiler feedwater pumping systems for power plants, providing expert consultancy on engineering modifications and crafting compelling technical business cases.

Dixy Lee Ray Award

A. ALAN MOGHISSI

The Dixy Lee Ray Award, established in 1998, recognizes significant achievements and contributions in the broad field of environmental protection. The award was established in honor of Dixy Lee Ray's advocacy to the development of those technologies that serve humanity. She believed that the engineering profession was uniquely qualified to develop and implement environmentally acceptable technologies.

Alan Moghissi, Ph.D., president emeritus of the Institute for Regulatory Science, is recognized for a career dedicated to improving environmental engineering and science; for research and leadership in multiple areas of environmental work, including nuclear engineering, regulatory engineering, environmental science, air programs, and bioenvironmental programs; and for championing transparency in science and engineering.

Recently deceased, Dr. Moghissi leaves a legacy of outstanding service and research. He was a charter member of the U.S. EPA, where he served as director of the Bioenvironmental and Radiological Research Division, principal science advisor for radiation and hazardous materials, and manager of the Health and Environmental Risk Analysis Program. His research has resulted in 500 papers, 20 books, and 300 reports that deal with peer review of government activities at federal, state and local levels.

Charles Russ Richards Memorial Award

NARAYANA R. ALURU

The Charles Russ Richards Memorial Award, established in 1944, was named in honor of a founder of Pi Tau Sigma. It is presented to an engineering graduate who has demonstrated outstanding achievement in mechanical engineering for 20 years or more following receipt of their bachelor's degree.

Narayana R. Aluru, Ph.D., professor and Cockrell family regents chair in engineering at The University of Texas at Austin, is honored for outstanding achievements in mechanical engineering for 20 years or more following graduation.

Dr. Aluru is the recipient of many prior honors, including the CMES Distinguished Young Author Award, the ASME Gustus L. Larson Memorial Award, and the Ted Belytschko Applied Mechanics Division Award. Prior to joining the University of Texas, Dr. Aluru held the Richard W. Kritzer distinguished professorship at the University of Illinois – Urbana-Champaign. Previously, Dr. Aluru served as associate editor of both the ASME/IEEE *Journal of Microelectromechanical Systems* and the ASME *Journal of Applied Mechanics*.

Safety Codes and Standards Medal

MARCUS H. TEVYAW

The Safety Codes and Standards Medal was established in 1986 to recognize contributions to the enhancement of public safety through the development and promotion of ASME safety codes and standards or through ASME safety accreditation activities.

Marcus H. Tevyaw, sole proprietor of MHT Codes & Consulting Specialists, is recognized for leadership in the promotion of elevator and escalator safety standards, promotion of the Qualified Elevator Inspector (QEI) program in Canada, and committee leadership within ASME.

Retired from the Technical Standards & Safety Authority since 2014, Mr. Tevyaw continues to provide consulting, investigation, and inspection services to the elevator industry through MHT Codes & Consulting Specialists. He has been recognized as an expert in the Ontario Court of Justice, providing expert testimony and interpretation of various industry standards. Mr. Tevyaw also remains active with NAESA International, supporting the certification and education of elevator inspectors, mechanics and consultants.

R. Tom Sawyer Award

KENNETH C. HALL

The R. Tom Sawyer Award, established in 1972, is bestowed upon an individual who has made important contributions toward the advancement of the gas turbine industry and the ASME International Gas Turbine Institute over a substantial period of time.

Kenneth C. Hall, Sc.D., Julian Francis Abele professor of mechanical engineering and materials science at Duke University, is honored for pioneering contributions to structural dynamics and unsteady aerodynamics in turbomachinery; for leadership of and service to ASME and the International Gas Turbine Institute; and for volunteer contributions to the turbomachinery community.

Dr. Hall's research focuses on novel methods for computing unsteady aerodynamics, structural dynamics, and aeroelasticity of aerospace vehicles and turbomachinery. He is a past vice president of the American Society of Mechanical Engineers and the former chair of the International Gas Turbine Institute. He is a recent recipient of the American Institute of Aeronautics and Astronautics Aerodynamics Award and, in 2020, was named a member of the National Academy of Engineering.

Milton C. Shaw Manufacturing Research Medal

SHREYES N. MELKOTE

The Milton C. Shaw Manufacturing Research Medal, established in 2009, recognizes significant fundamental contributions to the science and technology of manufacturing processes.

Shreyes N. Melkote, Ph.D., Morris M. Bryan Jr. professor of mechanical engineering at the Georgia Institute of Technology, is honored for significant and impactful contributions to the science and technological development of material removal processes at the macro- and micro-scales for difficult-to-shape engineering materials.

In addition to his professorship, Dr. Melkote serves as associate director of the Georgia Tech Manufacturing Institute and executive director of the Novelis Innovation Hub at Georgia Tech. He

is the author or co-author of over 250 publications across several research areas, including the science and technology of material removal processes, new process development including novel surface modification methods, and application of AI/ML methods to solve complex manufacturing problems. Additionally, Dr. Melkote is a former associate editor of the *International Journal of Machine Tools and Manufacture*, the ASME *Journal of Manufacturing Science and Engineering*, and *Machining Science and Technology*.

Ben C. Sparks Medal

MARY LYNN REALFF

The Ben C. Sparks Medal was established in 1990 in memory of Ben C. Sparks, a devoted member of ASME and a dedicated teacher of mechanical engineering technology and mechanical engineering. It is awarded to a candidate who demonstrates a record of accomplishment over an extended period of time; plays a major role in fostering new, innovative applications and approaches to the teaching of mechanical engineering and/or engineering technology; or effectively inspires promising systemic change that would enhance the readiness of graduates to begin engineering practice in industry.

Mary Lynn Realff, Ph.D., associate chair for undergraduate programs and Cox faculty fellow at the Georgia Institute of Technology, is honored for inspiring systematic changes that have enhanced the readiness of graduates to begin engineering practice in industry by building essential teamwork skills through undergraduate curricula and career development workshops for interdisciplinary graduate research teams.

With Georgia Tech since 1992, Dr. Realff is also the founding director of the Effective Team Dynamics Initiative, which cultivates a supportive, productive, and harmonious learning community grounded in strengths-based collaboration. Her operational leadership and strategic oversight have resulted in the initiative impacting 8,000 undergraduate and graduate students and 2,000 post docs, faculty, and staff in just the past five years.

Ruth and Joel Spira Outstanding Design Educator Award

SHANNA R. DALY

The Ruth and Joel Spira Outstanding Design Educator Award was established as a division award in 1998. Elevated to a Society award in 2001, it recognizes a person who exemplifies the best in furthering engineering design education.

Shanna R. Daly, Ph.D., Arthur F. Thurnau professor of mechanical engineering at the University of Michigan, is recognized for revolutionizing front-end engineering design education through innovative teaching, center development, impactful research, and dedication to diversity, inclusivity, and student mentorship, profoundly shaping the future of engineering design thinkers.

With over 70 journal articles published in collaboration with the graduate and undergraduate students she advises, Dr. Daly's work has received many best paper awards and been recognized by the University of Michigan's Henry Russel Award and the NSF CAREER Award. Her research has resulted in innovative tools like the Design Heuristics, which are integrated into engineering curricula worldwide. She is a co-founder of UM's Center for Socially Engaged Design and a prior recipient of the Monroe-Brown Foundation Education Excellence Award.

Spirit of St. Louis Medal

WILLIAM A. SIRIGNANO

Established in 1929 by Philip D. Ball, ASME Members, and Citizens of St. Louis, Missouri, the Spirit of St. Louis Medal is awarded for meritorious service in the advancement of aeronautics and astronautics.

William A. Sirignano, Ph.D., distinguished professor of mechanical and aerospace engineering at the University of California – Irvine, is recognized for pioneering and impactful research in rocket engine combustion dynamics, atomization, and spray; for the development of innovative concepts for propulsion and power; and for outstanding educational leadership and professional service.

Dr. Sirignano's research and teaching interests have spanned jet and rocket propulsion, spray dynamics and atomization, combustion dynamics, fluid dynamics, and applied mathematics. A well-regarded researcher, he has contributed analyses in numerous areas, including nonlinear rocket-combustor oscillations, nonlinear behavior of Helmholtz resonators, flame spread above liquid and solid fuels, droplet vaporization with internal circulation, and effects of stretched vorticity on flamelets in turbulent flow, among others. In 2023, he was named honorary Fellow of the American Institute of Aeronautics and Astronautics.

J. Hall Taylor Medal

GEORGE RAWLS

The J. Hall Taylor Medal was established in 1965 by the ASME Codes and Standards Board as a gift from Taylor Forge and Pipe Works to commemorate the pioneering work of J. Hall Taylor in the standardization of industrial products and safety codes for their usage. It is awarded for distinguished service or eminent achievement in the codes and standards area pertaining to the broad fields of piping and pressure vessels.

George Rawls, chief engineer at GBR Consulting, is honored for leadership and contributions to ASME through changes to design rules for Section VIII vessels, service to the ASME task group on hydrogen storage and transport tanks, and development of code criteria for additive manufacturing.

Mr. Rawls has been active in ASME codes since the 1990s. Currently, he serves on multiple code committees, including the Standards Committee on Pressure Vessels, the Board on Hearings and Appeals for the Council on Standards and Certification, and the BPTCS/BNCS Special Committee on Use of Additive Manufacturing for Pressure Retaining Equipment, where he presently serves as chair. He retired from the Savannah River National Laboratory in 2022.

Robert Henry Thurston Lecture Award

XIN ZHANG

The Robert Henry Thurston Lecture, established in 1925 in honor of ASME's first president, provides an opportunity for a leader in pure and/or applied science or engineering to present to the Society a lecture on a subject of broad interest to engineers. The Thurston Lecture was elevated to a Society award in 2000.

Xin Zhang, Ph.D., distinguished professor of engineering at Boston University, is honored for groundbreaking work on innovations, applications, and commercialization of metamaterials, both those that enable highly efficient air-permeable sound silencing and noise reduction and those that markedly boost MRI signal-to-noise ratio, significantly improving performance.

A well-regarded expert, Dr. Zhang is the recipient of many prior honors, including a Guggenheim Fellowship, the STAT Madness All-Star Award, and the IEEE EMBS Technical Achievement Award. Dr. Zhang was named to the European Academy of Sciences and Arts in 2023 and is a Fellow of the National Academy of Inventors, AAAS, AIMBE, APS, ASME, IEEE, and Optica.

Timoshenko Medal

PIERRE M. SUQUET

The Timoshenko Medal is conferred in recognition of distinguished contributions to the field of applied mechanics. Established by the Applied Mechanics Division in 1957, it honors Stephen P. Timoshenko, world-renowned authority in the field.

Pierre M. Suquet, Ph.D., senior researcher at the Centre National de la Recherche Scientifique, is recognized for pioneering contributions in the development of homogenization methods for composite materials.

A member of the French Academy of Sciences since 2004 and an international member of the National Academy of Engineering since 2021, Dr. Suquet is a previous awardee of the ASME Koiter Medal. He is a renowned expert in theoretical solid mechanics and author or co-author of hundreds of publications, including several books, covering mathematical analyses of elastoplasticity, homogenization, bounding techniques for nonlinear composites and computational (spectral) methods, and model reduction techniques for micromechanical problems. He previously served as chair of the French National Committee for Mechanics and secretary general of the European Society for Mechanics.

Yeram S. Touloukian Awards

The Yeram S. Touloukian Award, established in 1997, is bestowed triennially to recognize outstanding technical contributions in the field of thermophysical properties. Individuals who are internationally recognized for major contributions in the thermophysical properties field are eligible to receive this award.

MARK O. MCLINDEN

Mark O. McLinden, Ph.D., chemical engineer at the National Institute of Standards and Technology (NIST), is honored for major advancements in the HVAC&R and chemical industries, excellence in thermophysical property research of working fluids, and for advocating compliance with international regulations to satisfy often-competing requirements for performance, safety, and environmental impact.

Dr. McLinden joined the applied chemicals and materials division of the

NIST in 1988, where he produced pioneering research on the properties of alternatives to ozone-depleting CFC and HCFC refrigerants. Dr. McLinden's current focus is on highly accurate measurements of fluid properties over wide ranges of temperature and pressure and the design and fabrication of instruments for such measurements.

LI SHI

Li Shi, Ph.D., Ernest Cockrell Sr. chair professor in engineering at The University of Texas at Austin, is honored for sustained contributions to experimental and theoretical studies of thermophysical properties of high-thermal conductivity materials and magnetic insulators.

Dr. Shi's research and professional contributions have garnered several previous awards and honors. He is the recent recipient of the Heat Transfer Memorial Award in Science, has been an invited research Fellow for the Japan Society for the Promotion of Science, and has been elected Fellow of both ASME and the American Physical Society. Dr. Shi is also the prior editor-in-chief for *Nanoscale and Microscale Thermophysical Engineering*.

Worcester Reed Warner Medal

SHI-WEI "RICKY" LEE

The Worcester Reed Warner Medal, established in 1930, is awarded for outstanding contributions to the permanent literature of engineering.

Shi-Wei "Ricky" Lee, Ph.D., chair professor in the department of mechanical and aerospace engineering at the Hong Kong University of Science and Technology, is recognized for defining solder joint failure modes that impact industrial test standards.

Dr. Lee's research primarily focuses on technology development for electronics and optoelectronics packaging and additive manufacturing. He has further interest in wafer level packaging and heterogeneous integration, 3D printing for microsystems packaging, LED packaging for solid-state lighting and applications beyond lighting, and lead-free soldering and reliability analysis. Dr. Lee and his collaborators have produced numerous technical papers, four books, and 10 book chapters. Dr. Lee is also the recipient of several prior honors, including the Avram Bar-Cohen Memorial Divisional Award and Calvin W. Rice Lecture Award. He is a Fellow of the Institute of Electrical and Electronics Engineers, the Institute of Physics, the International Microelectronics Assembly and Packaging Society, and ASME.

George Westinghouse Medals

The George Westinghouse Medals were established to recognize eminent achievement or distinguished service in the power field of mechanical engineering. They honor the rich contribution to power development made by George Westinghouse, honorary member and 29th president of the Society. The Gold Medal was established in 1952 and the Silver Medal in 1971.

ROBERT M. WAGNER - GOLD

Robert M. Wagner, Ph.D., associate laboratory director for energy science and technology at the Oak Ridge National Laboratory, is honored for advancing the state of the art of clean power generation systems through research on combustion, fuel technologies, and controls; for innovative leadership of national consortia; and for uniting experts from diverse disciplines across industry, national laboratories, and academia.

At Oak Ridge, Dr. Wagner leads more than 500 researchers, technical professionals, and other staff focused on developing and deploying advanced technology solutions in manufacturing, buildings, transportation, and electrical grid infrastructure. He is a prior awardee of the McDonald Mentoring Award and Internal Combustion Engine Award and the former chair of the ASME Internal Combustion Engine Division.

DAVID ROBERT NOBLE - SILVER

David Robert Noble, senior program manager at the Electric Power Research Institute (EPRI), is honored for outstanding contributions to research and development of gas turbines, clean energy, and electric power production.

An expert in gas turbine research and development, Mr. Noble was formerly a senior research engineer and director in the Ben T. Zinn combustion laboratory at the Georgia Institute of Technology. At the EPRI, he is responsible for the gas turbine research area, where he and his team work on topics involving all aspects of the gas turbine system. He is co-editor of the book *Renewable Fuels: Sources, Conversion, and Utilization*, author or co-author on over 65 other publications, and holds five patents.

Arthur L. Williston Medal

MUHAMMAD SADIQ UL ISLAM

The Arthur L. Williston Medal, established in 1954, recognizes an engineering student or recent graduate for "fostering civic service." The recipient shall demonstrate considerable leadership in activities that "stimulate, foster or develop increased interest in, sense of responsibility for, or urge others to participate in social-service, civic, or public-spirited activities for the benefit of society."

Muhammad Sadiq Ul Islam, officer of engineering pneumatics at Serene Air, Karachi, Pakistan, is honored for exceptional leadership to the ASME NED University of Engineering and Technology Student Section, spearheading diversity, sustainability, and education initiatives; and for demonstrated commitment to community engagement and environmental conservation through volunteer work.

An early-career engineer, Mr. Sadiq is a 2022 graduate of the NED University of Engineering and Technology and the current vice chair of the ASME Pakistan Professional Section. As a student he served as co-director of media for his student section and editor-in-chief of the section's inaugural mechanical engineering magazine.

Savio L-Y. Woo Translational Biomechanics Medal

GUY M. GENIN

The Savio L-Y. Woo Translational Biomechanics Medal, established in 2015, recognizes an individual who has translated meritorious bioengineering science to clinical practice through research, education, professional development, and with service to the bioengineering community.

Guy Genin, Ph.D., Harold and Kathleen Faught professor of mechanical engineering at Washington University in St. Louis and co-director of the NSF Science and Technology Center for Engineering Mechanobiology, is recognized for distinguished translation of bioengineering science into improved vascular surgery devices and for associated contributions to professional development and education in translational biomechanics.

A recipient of many prior honors, Dr. Genin's work advances surgical techniques, molecular detection, and therapies for inflammation, wound healing, and fibrosis. He is co-director of the NSF Science and Technology Center for Engineering Mechanobiology, serves on the U.S. interagency modeling and analysis group's steering committee, and holds a position on the Society of Engineering Science's board of directors. He is currently an associate editor of the *Biophysical Journal*.

Henry R. Worthington Medal

PHILLIP M. LIGRANI

The Henry R. Worthington Medal, established in 1980, is bestowed for eminent achievement in the field of pumping machinery.

Phillip M. Ligrani, Ph.D., professor of mechanical and aerospace engineering and eminent scholar in propulsion at the University of Alabama in Huntsville, is recognized for the development of innovative and unique pumping concepts and devices with micro-, millimeter-, and macro-scale flow passage arrangements in consideration of the displacement of fluids subject to diverse physical phenomena.

Prior to joining Huntsville, Dr. Ligrani held the Oliver L. Parks endowed chair at St. Louis University and the Donald Schultz professorship at the University of Oxford. He is the recipient of several prior honors, including the Hermann Oberth Award from the AIAA and the ASME IGTI Outstanding Service Award. His current research interests include turbomachinery, convective heat transfer, fluid mechanics, transonic, supersonic, and hypersonic flows, micro-fluidics, and measurement technologies.

S. Y. Zamrik PVP Medal

CLAUDE FAIDY

The Pressure Vessel and Piping Medal was established in 1980. Renamed in 2010, it is bestowed for outstanding contributions in the field of pressure vessel and piping technology.

Claude Faidy, president of CF Integrity Company, is honored for contributions and service to ASME in the areas of pipe flaw evaluation, environmental fatigue evaluation, and evaluation standards; and for technical contributions in structural integrity, ageing management, safety analysis, and codes and standards for nuclear plants.

In addition to his presidency of CF Integrity, Mr. Faidy serves as a consultant on international codes and standards, regulation, nuclear safety, pressure equipment aging management, and quality management systems in France and internationally. As a member of ASME, Mr. Faidy has been instrumental in Section III, Section XI, Section VIII, and Section B31 Code activities. He is a member of the European Pressure Equipment Research Committee and an original member of the French Association for Nuclear Codes Development.