



ASME 2025 HONORS & AWARDS

TIMOTHY C. LIEUWEN

ASME MEDAL

THE ASME MEDAL WAS ESTABLISHED IN 1920 and is awarded for eminently distinguished engineering achievement.

Tim Lieuwen, Ph.D., P.E., executive vice president for research at the Georgia Institute of Technology, is honored for distinguished leadership and contributions to science, technology, workforce development, and policy in mechanical engineering with regional, national, and international impact on energy and propulsion systems.

In his current role at Georgia Tech, Dr. Lieuwen oversees a portfolio of research, economic development, and sponsored activities valued at over \$1.4 billion. In addition, he leads the Georgia Tech Research Institute, the Enterprise Innovation Institute, nine interdisciplinary research institutes, and several related research administrative support units. Prior to the vice presidency,

Dr. Lieuwen served in various leadership positions, including the executive directorship of the Strategic Energy Institute and as chair of the Daniel Guggenheim School of Aerospace Engineering at Georgia Tech.

With a significant and well-regarded research record in the areas of propulsion, combustion, sustainable transportation, and energy systems, Dr. Lieuwen is an author on over 400 papers and the editor or author of four books, including *Unsteady Combustor Physics*. He additionally serves on the boards of three major U.S. Department of Energy national laboratories: the Oak Ridge National Laboratory, Pacific Northwest National Laboratory, and National Renewable



Energy Laboratory.

Dr. Lieuwen has received numerous honors and recognition for his work in clean energy systems and policy, national security, and regional economic development. Additionally, he has been awarded a regents' professorship

and been named the David S. Lewis, Jr. chair in aerospace engineering at Georgia Tech. He is a member of the National Academy of Engineering, Fellow of the American Society of Mechanical Engineers, and Fellow of the American Institute of Aeronautics and Astronautics.

Dr. Lieuwen completed his master's and Ph.D. in mechanical engineering at Georgia Tech in 1997 and 1999, respectively.

TIMOTHY S. FISHER

HONORARY MEMBER

TIMOTHY S. FISHER, PH.D., PROFESSOR and John P. Schauerman and Claudia H. Schauerman endowed chair in engineering at the University of California, Los Angeles (UCLA), is honored for pioneering efforts at the convergence between heat transfer and nanomaterials, ranging from material processing to thermal characterization and modeling; and for distinguished service to the profession through conference organization and technical committee leadership.

A pioneering expert in heat transfer and the current editor-in-chief of the *ASME Journal of Heat and Mass Transfer*, Dr. Fisher is also the leader of the Nano Transfer Research Group at UCLA. His and his group's research has included studies of nanoscale heat transfer, electronics cooling, carbon nanomaterial synthesis, solar-thermal

fuels and materials production, coupled electro-thermal effects in materials and devices, microfluidics, biosensing, thermal systems, and related computational methods ranging from atomistic to continuum scales. In these and related areas, he has authored more than 300 papers in peer-reviewed journals, contributed to hundreds of conference proceedings and presentations, and mentored dozens of doctoral advisees.

Dr. Fisher's impressive record of service to the field includes contributions to the ASME heat transfer division, nanoengineering council, committee on heat transfer electronic systems, and as a representative to the International Mechanical Engineering



Congress and Exposition (IMECE). Additionally, he has received several prior honors, including the ASME Heat Transfer Memorial Award, the ASME McDonald Mentoring Award, the Avram Bar-Cohen Best Paper Award, and, from

Purdue, the Ruth and Joel Spira Award. He is a Fellow of ASME and, in 2014, he was elected to the Purdue Innovator Hall of Fame.

Dr. Fisher joined UCLA in 2017, where, prior to his chairship, he held the James G. Dwyer endowed professorship. Previously, he held professorships at Purdue University and, earlier, Vanderbilt University. He completed his Ph.D. at Cornell University in 1998.

JOHN H. LIENHARD V

HONORARY MEMBER

JOHAN H. LIENHARD V, PH.D., P.E., ABDUL Latif Jameel professor of water and mechanical engineering at the Massachusetts Institute of Technology, is honored for sustained contributions to thermodynamic and transport process engineering through modeling, experimentation, design, and patents; for a pioneering open-access textbook; and for leadership in sustainability research in academia.

A recognized expert in the field, Dr. Lienhard's desalination research spans humidification-dehumidification, membrane distillation, nanofiltration, electrodialysis, forward and reverse osmosis, solvent extraction, and other technologies. He and his research group have applied a power-systems framework to almost every class of desalination technology, leading to several pioneering insights. His work in this area led him to

co-found the water treatment company Gradiant Corp., which is currently valued at over \$1 billion and employs over 1,200 people.

Prior to his desalination research, Dr. Lienhard made several advancements in the areas of cooling by liquid jet impingement and high-heat flux engineering. Across his areas of expertise, Dr. Lienhard has authored over 300 peer-reviewed papers and three textbooks. In 2001, he published what was then among the very first open-access textbooks in engineering. In addition, he is the founder for the Abdul Latif Jameel Water and Food Systems Lab, through which he funded more than 400 researchers tackling the challenges of a rising population on a rapidly changing planet.



Dr. Lienhard is the recipient of many prior awards and honors, including a lifetime achievement award from the International Desalination and Reuse Association, the Donald Q. Kern Award from the American Institute of Chemical Engineers, the

Edward F. Obert Award and the Heat Transfer Memorial Award from ASME. He was elected Fellow of ASME in 2000 and Fellow of the American Association for the Advancement of Science in 2018. He holds over 40 U.S. patents.

Prior to joining MIT, Dr. Lienhard completed his Ph.D. in engineering science and applied mechanics at the University of California, San Diego in 1988 and his master's in engineering at the University of California, Los Angeles in 1984.

RAJ M. MANGLIK

HONORARY MEMBER

RAJ M. MANGLIK, PH.D., PROFESSOR of mechanical engineering and director of the Thermal-Fluids & Thermal Processing Laboratory at the University of Cincinnati, is honored for innovative contributions to mechanical engineering, including advances in both fundamental and applied industry-related research in energy and thermal-fluid sciences; and for impactful leadership in the professional society in building a diverse and inclusive community.

The late Dr. Manglik was a renowned expert in interfacial phenomena, boiling heat transfer, bubble dynamics and droplet-spray transport processes, thermal processing of polymeric materials and non-Newtonian flows, enhancement of heat transfer, compact and high-performance heat exchangers, and waste-heat

recovery and energy systems. He published over 260 archival papers and technical reports and 15 books, monographs, and chapters, including the celebrated *Principles of Heat Transfer* and *Plate Heat Exchangers: Design, Applications and Performance*. Throughout his career, he also served impressive tenures as an associate editor of the ASME *Journal of Heat Transfer* and editor-in-chief of the *Journal of Advanced Heat Transfer* and served as both member and chair of the HTD Executive Committee.

A Fellow of ASME, Dr. Manglik was the recipient of several prior awards, including the very first CAREER Award from the National Science Foundation (1995), the ASME



Melville Medal, the ASME HTD 75th Anniversary Medal, a Heat Transfer Memorial Award, the Potter Gold Medal, and the AIChE Donald Q. Kern Award, among others. Through his impressive research career, he garnered over \$10 million in grants for various

initiatives. A beloved mentor, Dr. Manglik supervised and advised dozens of master's and Ph.D. candidates, as well as many junior faculty members throughout his career.

Dr. Manglik received his B.Tech. in mechanical engineering from the Indian Institute of Technology – Madras, his M.S. from Iowa State University, and his Ph.D. from Rensselaer Polytechnic Institute. He passed away in August 2025.

CHANDRAKANT D. PATEL

HONORARY MEMBER

CHANDRAKANT D. PATEL, P.E., PRESIDENT of Chandrakant Patel Consulting and former senior vice president, chief engineer, and senior fellow at HP, Inc., is honored for unprecedented creativity, breadth, and permanent impact on engineering; for pioneering developments in the fields of energy-efficient data centers, thermal management of chips and systems, and additive manufacturing.

With more than 40 years of experience in Silicon Valley, Mr. Patel has a well-regarded record of advancements in hard disk drives, chips, high performance computing systems, storage, networking, additive manufacturing systems, and software platforms. He is a pioneer in energy-efficient data center solutions, having founded the Smart Data Center research program at HP, and a recognized leader in AI, energy efficient computing,

and sustainability.

Mr. Patel has a strong record of engineering instruction, having served as adjunct faculty in engineering at the University of California Berkeley Extension, San Jose State University, Santa Clara University and Chabot College for over two decades. He remains active in workforce development and private sector engagement through ASME.

Mr. Patel is the recipient of many prior honors, including the Richard Chu Award for excellence in thermal and thermomechanical management of electronics, the inaugural NextGen award for empowering the next generation of engineers to build a more equitable and sustainable future, and, for significant contributions



to semiconductor thermal management, the 2017 THERMI Award. He is a Fellow of IEEE and ASME, a member of the National Academy of Engineering, and has been named to the Silicon Valley Engineering Hall of Fame. He holds 165 U.S. patents and has published

more than 150 papers. He has been named a distinguished alum of both San Jose State University and the City College of San Francisco.

He completed his master's in mechanical engineering at San Jose State University in 1988. Mr. Patel completed his associate of science in engineering at the City College of San Francisco, and his bachelor's in mechanical engineering at the University of California, Berkeley.

KON-WELL WANG

HONORARY MEMBER

KON-WELL WANG, PH.D., A. GALIP Ulsoy distinguished university professor of engineering and Stephen P. Timoshenko professor of mechanical engineering at the University of Michigan, is recognized for lifelong distinguished contribution and leadership that has transformed engineering research and education, established new fields, and elevated the profession.

Dr. Wang is a renowned researcher in the field of structural dynamics and controls. His work has led to pioneering advancements in multifunctional intelligent structures and materials, including the discovery of scholarly knowledge, novel methodologies, and impactful technologies that have greatly benefited engineering systems such as automotive drivetrains, rotorcraft airframes, and space reflectors. He has published over 400 technical articles and

books and mentored nearly 100 researchers in these and similar areas.

A well-regarded champion of engineering education and research, Dr. Wang carries a significant record of leadership, having advanced the profession through ASME and elsewhere. He has served as chair of the ASME Department Heads Executive Committee, as editor-in-chief of ASME's *Journal of Vibration and Acoustics*, as department chair of mechanical engineering at the University of Michigan, and as division director of engineering education and centers at the National Science Foundation. He is also the recipient of numerous prestigious honors and awards, including many from ASME, such as the Charles



Russ Richards Award, the Rayleigh Lecture Award, the J. P. Den Hertog Award, and the Adaptive Structures and Material Systems Prize. He is a Fellow of ASME, the American Association for the Advancement of Science, the Institute of Physics, and the Royal Aeronautical Society.

Prior to joining the University of Michigan in 2008, Dr. Wang served as the William E. Diefenderfer chaired professor and co-founder and associate director of the Vertical Lift Research Center of Excellence at Penn State University. He received his Ph.D. and master's degree in mechanical engineering from the University of California, Berkeley in 1985 and 1982, respectively.

B. N. KALYANI

HOLLEY MEDAL

ESTABLISHED IN 1924, THE HOLLEY Medal is presented to an individual whose engineering accomplishments have contributed to the betterment of society.

B. N. Kalyani, chairman and managing director of Bharat Forge Limited, is recognized for substantial contributions to engineering, advanced manufacturing, environmentalism, and philanthropy, and for visionary and world-wide industry leadership.

With more than five decades of leadership, Mr. Kalyani has steered Bharat Forge's transformation into a globally recognized leader in forging and precision engineering, catering to diverse industries such as automotive, aerospace, defense, energy, and infrastructure, and

establishing it as a pioneer in advanced manufacturing. Beyond Bharat Forge, Mr. Kalyani has played a pivotal role in shaping India's industrial and economic landscape. He is a member of the Prime Minister's Science Technology & Innovation Advisory Council, co-chairs several high-profile international business forums, including the India-Sweden Business Roundtable, and is the founding president of the Society of Indian Defence Manufacturers.

For his efforts across industry and economic development, Mr. Kalyani has received many prior honors, including the Padma



Bhushan, India's third-highest civilian award, the Order of the Rising Sun from Japan, the Cross of the Order of Merit from Germany, Commander First Class of the Royal Order of Polar Star from Sweden, and the Knight in the Order of

the Legion of Honour from France. Most recently, he was awarded the 2025 Arjan Vaswani Founders' Leadership Award and named the 2025 Industry Science Leader by FAST India.

Mr. Kalyani completed his bachelor's degree in engineering with honors at BITS Pilani in 1970 and his master's at the Massachusetts Institute of Technology in 1972.

CALVIN MACKIE

RALPH COATS ROE MEDAL

THE RALPH COATS ROE MEDAL WAS established in 1972 to recognize an outstanding contribution toward better public understanding and appreciation of the engineer's worth in society.

Calvin Mackie, Ph.D., founder and CEO of STEM NOLA, founder and CEO of STEM Global Action, and CEO of Channel ZerO, is honored for educating young people about the wonders of engineering and opening opportunities for underrepresented populations to pursue higher technical education and rewarding STEM careers.

Through STEM NOLA and STEM Global Action, Dr. Mackie's efforts reach tens of thousands of young students and adults each year, with a particularly notable impact on the 63% of STEM NOLA and STEM Global Action students who come from low-income households, and STEM NOLA alone has engaged more than 200,000 K-12 students since its inception

in 2013. This impact has since led to expanded reach for STEM programming, inspiring offshoots in Michigan, Alabama, Georgia, Florida, South Carolina, and beyond. STEM NOLA is also the recent recipient of a \$3 million award to expand its programming across Louisiana.

A sought-after speaker and educator, Dr. Mackie is a prior awardee of the 2019 Congressional Black Caucus Foundation Phoenix Award and the 2024 AARP Purpose Prize, which honors nonprofit founders over 50 who are using their expertise to make a lasting impact. He is also a recipient of the Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring and holds a patent for a device to retrofit luggage stow bins in



Boeing aircraft. Additionally, he is the author of two books: his memoir, *A View from the Roof: Lessons for Life and Business, and Grandma's Hands: Cherished Moments of Faith and Wisdom*.

Currently, Dr. Mackie serves his community

through multiple advisory boards, including the Louisiana STEM Advisory Council and the boards of the University of Holy Cross and the Louisiana Children's Museum. Prior to his work with STEM NOLA, Dr. Mackie held a tenured professorship at Tulane University, with noted expertise in the areas of heat transfer, fluid dynamics, energy efficiency, and renewable energy.

Dr. Mackie earned his Ph.D. in mechanical engineering from the Georgia Institute of Technology in 1996.

Adaptive Structures and Material Systems Award

GEORGE A. LESIEUTRE



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. Established by the Aerospace Division in 1993, it was elevated to a Society award in 2014.

George A. Lesieutre, Ph.D., professor emeritus of aerospace engineering at Penn State University, is recognized for pioneering contributions to adaptive structures technologies and their various applications, including shunted piezoelectric materials for energy harvesting and vibration control, and solid-state and rectifying actuators; and for other key insights into electro-mechanical coupling.

A well-regarded expert on the structural dynamics of aerospace systems, Dr. Lesieutre served in several prominent roles at Penn State, including associate dean for research, department head, and director of the Center for Acoustics and Vibration. He is a Fellow of the American Institute of Aeronautics and Astronautics and the recipient of many prior honors, including five annual best paper awards and the SPIE Lifetime Achievement Award in Smart Structures and Materials.

Ayyub-Wiechel Risk Analysis Award

ENRICO ZIO



Established by the Safety Engineering & Risk Analysis Division in 2015 and elevated to a Society award in 2024, the Ayyub-Wiechel Risk Analysis Award recognizes an individual who has made significant contributions to the field of risk, reliability, and safety through practice, research, teaching and/or outstanding leadership.

Enrico Zio, Ph.D., professor of engineering at the École des Mines, ParisTech, PSL University, France, is honored for contributions to computational risk assessment and integrated deterministic and probabilistic safety assessment, and for leadership in the advancement of reliability engineering by machine learning techniques for prognostics, health management, and predictive maintenance.

In addition to his appointment at the École des Mines, Dr. Zio holds a full professorship at Politecnico di Milano, Italy, and multiple other distinguished guest professorships and adjunct professorships around the world.

He has been named Fellow of multiple distinguished organizations, including the IEEE and the Asia-Pacific Artificial Intelligence Association.

Avram Bar-Cohen Memorial Medal

H. PETER de BOCK



The Avram Bar-Cohen Memorial Medal recognizes contributions to academic, research, and industrial communities in the broad field of heat transfer and related electronics, photonics, mechanics, and packaging phenomena. Established in 1999 as the InterPACK Achievement Award, it was elevated to a Society Award and renamed the Avram Bar-Cohen Memorial Medal in 2022.

H. Peter de Bock, Ph.D., program director at the Department of Energy's Advanced Research Projects Agency – Energy (ARPA-E), is recognized for outstanding technical contributions to the thermal management of electronics packaging with diverse application areas, and for impactful mentorship to researchers, engineers, and students.

Prior to his time at ARPA-E, Dr. de Bock held several roles at GE Research, including that of principal engineer for thermo-sciences. A Fellow of ASME, Dr. de Bock is also the prior recipient of the ASME Clock Award and the holder of more than 50 patents.

Barnett-Uzgiris Product Safety Design Award

WEI CHEN



The Barnett-Uzgiris Product Safety Design Award recognizes individuals who have made significant contributions to the safe design of products through teaching, research, and professional accomplishments. Originally established as the Triodyne Safety Award, in 2008 it was elevated to a Society award and renamed the Barnett-Uzgiris Product Safety Design Award.

Wei Chen, Ph.D., Wilson-Cook professor in engineering design and chair of the department of mechanical engineering at Northwestern University, is honored for significant contributions to design under uncertainty that have advanced both theoretical development and practical applications of statistical inference and probability theory for developing robust and reliable products and systems.

A pioneer in the use of AI and uncertainty quantifications in designing emerging materials systems, Dr. Chen's methods have been widely adopted in industry. She is a Fellow of ASME and

a recent recipient of a BRITE Fellowship, an ASME Design Automation Conference Best Paper Award, and eight best paper awards. In 2019, she was elected to the U.S. National Academy of Engineering.

Zdeněk P. Bažant Medal

HUCK BENG CHEW



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.

Huck Beng Chew, Ph.D., professor of aerospace engineering at the University of Illinois at Urbana-Champaign, is honored for pioneering contributions in the nano- and micromechanics of materials through the development of novel scale-bridging tools, leading to continuum-level understanding of mechanistic processes and the bridging of fundamental science to real-world engineering applications.

Dr. Chew's current research focuses on the deformation and failure processes for predictive engineering performance of a range of materials. He is a prior recipient of an AIAA Electric Propulsion Best Paper Award and has been named Fellow of the Institute of Mechanical Engineers. He is currently an associate editor for the *Journal of Mechanical Engineering Science*.

Bergles-Rohsenow Young Investigator Award in Heat Transfer

PRASHANT SINGH



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.

Prashant Singh, Ph.D., assistant professor of mechanical engineering at the University of Tennessee, Knoxville, is honored for outstanding contributions to the fundamental understanding of thermal transport in architected materials for high temperature heat exchanger applications, and for advancements in experimental techniques for non-intrusive thermal diagnostics.

Having served as an assistant professor at Mississippi State prior to Tennessee, Dr. Singh has secured over \$3 million of external funding for his research, including 11 grants from organizations such as the Department of En-

ergy, the National Science Foundation, and the Oak Ridge Associated Universities. His research efforts have resulted in over 125 research articles, including 74 journal papers, 3 book chapters, and 50 peer-reviewed conference articles.

Blackall Machine Tool and Gage Award

SEN XIANG

XINGTAO LIU

LICONG AN

HAOZHENG QU

GARY J. CHENG



The Blackall Machine Tool and Gage Award is presented for the best current original paper or papers that have been presented before ASME during the two calendar years immediately preceding the year of the award and result in a significant contribution to the manufacturing processes and systems for the design or application of machine tools, gauges, dimensional measuring instruments, or new manufacturing technologies and metrology approaches.

Sen Xiang, Ph.D., laser welding engineer at ThyssenKrupp; Xingtao Liu, Ph.D., associate professor of mechanical engineering at Southeast University; Licong An, Ph.D., reliability engineer at Apple, Inc.; Haozheng Qu, Ph.D., research scientist at the GE Vernova Advanced Research Center; and Gary J. Cheng, Ph.D., professor of industrial and materials engineering at Purdue University, are recognized for the paper titled "Nanoengineered Laser Shock Processing Via Pulse Shaping for Nanostructuring in Metals: Multiscale Simulations and Experiments."

A recognized expert in laser welding processes, Sen Xiang has developed a coupled phase field and dislocation dynamics model to investigate the behavior of precipitates and dislocations during laser shock peening process.

An award-winning, early-career scholar, Xingtao Liu's current research interests lie in the areas of micro/nano manufacturing, laser processing of materials and material characterization.

A Purdue University graduate, Licong An specializes in laser-material interactions, nanomaterial fabrication, and reliability engineering. His research at Purdue focused on laser-induced liq-

uid metal interactions for designing and fabricating functional nanomaterials with scalable applications.

At GE, Haozheng Qu leads multiple internal programs related to advanced energy including nuclear fuel development and irradiation effects on reactor structural materials.

A Fellow of ASME, Gary J. Cheng's research interests reside in the areas of advanced materials and nanomanufacturing for applications in areas such as aerospace, medicine, energy, and electro-optics.

Per Bruel Gold Medal for Noise Control and Acoustics

TONY JUN HUANG



The Per Bruel Gold Medal for Noise Control and Acoustics was established in 1987 in honor of Dr. Bruel, who pioneered the development of sophisticated noise and vibration measuring and processing equipment. The medal recognizes eminent achievement and extraordinary merit in the field.

Tony Jun Huang, Ph.D., William Bevan distinguished professor of mechanical engineering and materials science at Duke University, is honored for pioneering and innovative contributions to the science and technology of acoustofluidics and surface acoustic wave tweezers, and for mentorship of both emerging and established leaders in the field of acoustics.

A Fellow of ASME and the National Academy of Inventors, among other prestigious organizations, Dr. Huang has authored more than 300 peer-reviewed journal articles and holds 32 issued or pending patents. His awards include the NIH Director's New Innovator Award, SME Outstanding Young Manufacturing Engineer Award, IEEE Sensors Council Technical Achievement Award, and ASME Van Mow Medal.

Thomas K. Caughey Dynamics Medal

BALAKUMAR BALACHANDRAN



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.

Balakumar Balachandran, Ph.D., distinguished university professor and

Minta Martin professor of mechanical engineering at the University of Maryland, is recognized for groundbreaking experimental, computational, and analytical work on the dynamics of nonlinear mechanical systems subjected to random noise disturbances.

A Fellow of ASME and an expert in non-linear phenomena, Dr. Balachandran is an author of many influential publications, including the textbooks *Applied Nonlinear Dynamics: Analytical, Computational, and Experimental Methods and Vibrations*, as well as the text *Delay Differential Equations: Recent Advances and New Directions*.

Edwin F. Church Medal

JOSEPH J. RENCIS



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

Joseph J. Rencis, Ph.D., P.E., professor and associate dean of the School of Engineering Worldwide at Embry-Riddle Aeronautical University, is recognized for eminent service to mechanical engineering, the profession, and workforce development, and for educational initiatives that have shaped countless pre-college and university students.

Prior to joining Embry-Riddle, Dr. Rencis held professorships and leadership positions at the Worcester Polytechnic Institute, the University of Arkansas, the University of Texas – Dallas, and SUNY Albany, among others. A Fellow of ASME, he is a prior chair of the ASME Mechanical Engineering Department Head Committee, chair of the Worcester section, and a prior member of the ASME Center for Education board of directors.

Devor-Kapoor Manufacturing Medal

FENGZHOU FANG



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

Fengzhou Fang, Ph.D., professor of precision manufacturing at University College Dublin, is honored for significant contributions to nano-machining mechanics, including the advancement of extrusion-dominated material removal, the establishment of the three paradigms of manufacturing advancement, and other significant advance-

ments in atomic- and close-to-atomic-scale manufacturing.

Dr. Fang's current research is situated in the fields of freeform optics design, manufacturing, biomanufacturing, and ultra-precision machining and metrology. He has been elected Fellow of numerous organizations, including the Society of Manufacturing Engineers, the International Academy of Engineering and Technology (AET), the International Society for Nanomanufacturing (ISNM), and the International Academy for Production Engineering (CIRP).

Daniel C. Drucker Medal

HANQING JIANG



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

Hanqing Jiang, Ph.D., chair professor of mechanical engineering at Westlake University, is honored for pioneering studies of origami-based mechanical metamaterials and devices and exemplary service to engineering communities through ASME and extensive editorial work.

Before joining Westlake, Dr. Jiang was a faculty member in mechanical engineering at Arizona State University from 2006 to 2021. He has authored five book chapters and over 150 peer-reviewed journal papers. He has been elected an ASME Fellow, a member of the European Academy of Sciences and Arts, and a member of the European Academy of Sciences. He currently serves as Chair of the Executive Committee of the ASME Materials Division.

Thomas A. Edison Patent Award

XIN ZHANG



The Thomas A. Edison Patent Award, established in 1997, recognizes the creativity of a patented device or process that has the potential of significantly enhancing some aspect of mechanical engineering.

Xin Zhang, Ph.D., distinguished professor of engineering at Boston University, is honored for the patented ultra-open metamaterial silencer, a groundbreaking innovation that revolutionizes acoustic silencing, significantly advances mechanical engineering, and transforms industries such as HVAC, transportation, and manufacturing through widespread, real-world application.

Dr. Zhang is a recipient of many prior honors. Among these are a Gug-

enheim Fellowship, a STAT Madness All-Star Award, the Sigma Xi Walston Chubb Award, and multiple IEEE awards. In addition to being named Fellow of ASME, Dr. Zhang has been elected to many other professional and academic organizations, including the European Academy of Sciences and Arts, the National Academy of Inventors, IEEE, and Optica.

William T. Ennor Manufacturing Technology Award

SATYANDRA K. GUPTA



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 which has resulted in substantial economic or societal benefits.

Satyandra K. Gupta, Ph.D., Smith International professor and director of the Center for Advanced Manufacturing at the University of Southern California, is recognized for innovations in the area of physics-informed artificial intelligence, leading to the development of smart robotic cells that reduce ergonomically challenging tasks for human workers, provide consistent quality, and reduce scrap and rework in surface finishing applications.

A Fellow of ASME, Dr. Gupta's research is situated in the areas of artificial intelligence, human-centered automation, and smart manufacturing. He has published more than 500 technical articles in journals, conference proceedings, and edited books. He also holds 24 U.S. patents.

Nancy DeLoye Fitzroy and Roland V. Fitzroy Medal

SEID KORIC



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

Seid Koric, Ph.D., technical associate director at the National Center for Supercomputing Applications (NCSA) and research professor of mechanical science and engineering at the University of Illinois at Urbana-Champaign, is honored for a career of pioneering contributions to advanced computing

and artificial intelligence methods and applications in engineering, as well as their translation to industry practices by improving technology, efficiency, and safety, and lowering environmental impact.

Early in his career, Dr. Koric developed groundbreaking numerical methods for multiphysics modeling of steel solidification and enabled their global adoption in continuous casting processes. He has led pioneering projects on Blue Waters, the world's first sustained, open, petascale supercomputing system, and was one of the founders of the modern NCSA industry partner program, advancing partnerships with the private sector.

Fluids Engineering Award

MICHAEL S. TRIANTAFYLLOU



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.

Michael S. Triantafyllou, Ph.D., Henry L. and Grace Doherty professor of ocean science and engineering at the Massachusetts Institute of Technology and director of the MIT Sea Grant Program, is honored for pioneering advancements in biomimetic robotics, vorticity control, and fluid-structure interaction, and for revolutionizing the understanding of vortex-induced vibrations and aquatic propulsion through innovative, AI-driven research methodologies, significantly impacting marine engineering and experimental fluid dynamics.

A member of the Technical Order of Greece, Dr. Triantafyllou is a pioneer in the development of biomimetic robots to study the basic mechanisms of flow control that lead to the outstanding agility of fish and cetaceans. Dr. Triantafyllou has served on the American Bureau of Shipping's Marine Technical Committee since 2015 and, from 2013 – 2017, served as the chairman of the board of the National Technical University of Athens.

Y. C. Fung Early Career Award

SPENCER E. SZCZESNY



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.

Spencer E. Szczesny, Ph.D., associate professor at Penn State University with joint appointments in biomedical engineering and orthopedics and rehabilitation, is recognized for discoveries related to tendon structure-function relationships during development and disease; for identifying sex-specific differences in ligament remodeling due to mechanical loading; and for providing public access to biomechanics equipment and techniques.

Prior to joining Penn State, Dr. Szczesny worked as a design engineer for Aesculap Implant Systems and as a research assistant at the Helmholtz Institute for Biomedical Technology in Aachen, Germany. He has served as the associate editor of the journal *Connective Tissue Research* and is currently a diversity advocate for the *ASME Journal of Biomedical Engineering*. Dr. Szczesny is a Fellow of ASME.

Gas Turbine Award

MIKOLAJ J. PERNAK

TOM E.W. NICHOLAS

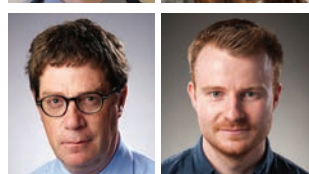
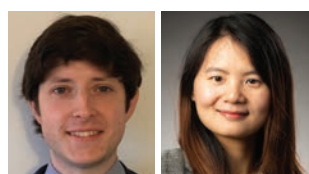
JAKE T. WILLIAMS

RICHARD JACKSON

HUI TANG

GARY LOCK

JAMES A. SCOBIE



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.

Mikolaj J. Pernak, Ph.D. Candidate at the University of Bath; Tom E. W. Nicholas, Ph.D., research associate at the University of Bath; Gary Lock, Ph.D., lecturer at the University of Bath; Hui Tang, Ph.D., lead researcher at the University of Bath; James A. Scobie, Ph.D., chartered engineer and associate professor at the Univer-

sity of Bath; Richard Jackson, Ph.D., lead consultant for Decision Analysis Services Ltd. in the UK; and Jake T. Williams, Rolls-Royce industrial supervisor for buoyancy induced flow research at the Universities of Bath and Surrey, are honored for the paper titled "Experimental Investigation of Transient Flow Phenomena in Rotating Compressor Cavities."

At Bath, Mikolaj Pernak is engaged in research on heat transfer and aerospace propulsion and has authored or co-authored multiple journal publications. He has been awarded two best paper awards.

Tom E.W. Nicholas is a researcher who focuses on theoretical modelling and data analysis. His Ph.D. thesis at the University of Bath was conducted alongside industrial collaborators including Rolls-Royce and Siemens Energy.

After graduating from Bath in 2019, Jake T. Williams joined Rolls-Royce. Currently, he is an aerothermal engineer focused on cooling design and thermal modelling of gas turbine hot gas path components.

Dr. Richard Jackson was previously the technical lead for the commissioning and operation of the buoyancy-induced flow rig at the University of Bath, and he has prior research expertise in areas of flow control methods in low-pressure turbine stator-well and tip cavities.

Dr. Hui Tang has published 35 papers in the areas of fluid mechanics, heat transfer, and turbomachinery. She has developed theoretical models of buoyancy-induced heat transfer in compressors and hot gas ingestion through rim seals in turbines.

Currently serving as a professor of engineering at Bath, Dr. Gary Lock holds research interests in experimental fluid dynamics and heat transfer, particularly related to aero-engine SAS, through which he has taken up significant collaborative work with Siemens, Rolls-Royce, and others.

A prior recipient of many ASME awards and honors and an author on over 60 papers, Dr. James A. Scobie's current research interests include experimental modelling of hot-gas ingestion through turbine rim seals, fluid dynamics of rotating flow systems, novel shaft sealing technologies and interaction of sealing and mainstream flows in turbines.

Kate Gleason Award

KAREN A. THOLE



Established in 2011 by the ASME Foundation, the Kate Gleason Award, recognizes outstanding achievements by a female engineer. It honors the

legacy of the first woman to be welcomed into ASME as a member.

Karen A. Thole, Ph.D., Robert J. Vlasic dean of engineering at the University of Michigan, is honored for providing students unique educational experiences involving large-scale experiments and mentoring them for positions in industry, government, and academia.

A Fellow of ASME, Dr. Thole is a groundbreaking scholar and educator. She was the first woman to serve on the ASME K-14 Heat Transfer Committee, one of the first on the board of the International Gas Turbine Institute, and the first female head of the department of mechanical engineering at Penn State. In collaboration with one of her graduate students, Dr. Thole revolutionized cooling standards across industries with the development of the 777 hole. More recently, she spearheaded a groundbreaking collaboration among turbine manufacturers, the Department of Energy, NASA, and the Department of Defense, to develop standard turbine blade geometry for benchmarking exercises. For these and other efforts, she previously received the AIAA Mary W. Jackson Award, the ASME R. Tom Sawyer Award, and the ASME Heat Transfer Award, among others.

Melvin R. Green Codes and Standards Medal

GEORGE RAWLS



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.

George Rawls, chief engineer at GBR Consulting, is honored for exceptional leadership in additive manufacturing, for developing innovative approaches to qualify materials produced using additive manufacturing processes, and for his essential role in the advancement of the application of additive manufacturing in ASME Codes and Standards.

Mr. Rawls has forty years of experience in the design and analysis of pressure vessels and components for the nuclear and chemical processing industries. Mr. Rawls became involved with ASME Boiler and Pressure Vessel Code in the early 1990s. The majority of Mr. Rawls' career has been spent with the Department of Energy, including thirty-seven years at the Savannah River National Laboratory working on pressure system design and fitness for service.

A Fellow of ASME, Mr. Rawls currently chairs the Standards Committee on Use of Additive Manufacturing for Pressure Retaining Equipment.

Edward Groot Interdisciplinary Team Science Medal in Bioengineering

THE ATP-BIO TEAM



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

The ATP-Bio Team, led by John Bischof, Ph.D., professor of mechanical engineering at the University of Minnesota, and Mehmet Toner, Ph.D., Helen Andrus Benedict professor of biomedical engineering at the Harvard Medical School, is honored for innovative approaches to biopreservation technologies that stop biological time and radically extend the ability to bank and transport cells, embryos, tissue, organoids, organs, and organisms.

ATP-Bio is a \$26 million, five-year renewable grant from the NSF to support advanced technologies for the preservation of biological systems. The leadership team, together with its 30 ATP-Bio partners, seeks to revolutionize cell therapy, regenerative medicine, aquaculture, and organ and tissue markets estimated at \$300 billion - \$600 billion annually.

J. P. Den Hartog Award

RICHARD H. RAND



The J.P. Den Hartog Award recognizes lifetime contributions to the teaching and practice of vibration engineering. The award was established by the Design Engineering Division in 1987.

Richard H. Rand, Sc.D., professor of mathematics and mechanical and aerospace engineering at Cornell University, is honored for lifetime contributions to vibration engineering through pioneering research at the intersection of mathematics and engineering, with emphasis on the complexities arising in the response of nonlinear structural systems.

In addition to his work as faculty at Cornell, Dr. Rand has served as a visiting professor at the University of California, Berkeley in 1981 and at UCLA

in 1989. He is a Fellow of ASME and serves on the editorial boards of the *Journal of Vibration and Control*, the *International Journal of Nonlinear Mechanics*, *Communications in Nonlinear Science and Numerical Simulation*, and the *Journal of Applied Nonlinear Dynamics*. He has ongoing research in nonlinear vibrations of MEMS (micro-electrical-mechanical systems), evolutionary dynamics, the dynamics of particle accelerators, and differential-delay equations.

Heat Transfer Memorial Awards

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

General

S. A. SHERIF



S.A. Sherif, Ph.D., professor of mechanical and aerospace engineering at the University of Florida, is honored for transformative research in

heat and mass transfer in frosting, especially under supersaturated conditions, and for exemplary leadership and service in the areas of heat transfer and thermal science.

Dr. Sherif is the founding director of the Wayne K. and Lyla L. Masur HVAC Laboratory, the director of the UF Industrial Training and Assessment Center, and the director of the UF Mobile Energy Laboratory. He is a Fellow of ASME and several other prominent organizations, including the Royal Aeronautical Society, the American Society of Thermal and Fluids Engineers, and the AIAA. He has served as editor-in-chief of the ASME *Journal of Thermal Science and Engineering Applications* and the *Journal of Solar Energy Engineering*.

Science

YASUYUKI TAKATA



Yasuyuki Takata, Ph.D., professor emeritus and specially-appointed professor at the International Institute for Carbon-Neutral Energy Research at Kyushu University, is recognized for pioneering contributions to phase-change heat transfer that have advanced the understanding of boiling and evaporation processes at contact line; for contributions to the measurement of thermophysical prop-

erties of hydrogen at high pressure; and for service and leadership in the international heat transfer community.

In addition to his appointment at Kyushu University, Dr. Takata has been appointed honorary professor at the Institute for Multiscale Thermo-fluids at the University of Edinburgh. His research interests include two-phase flow and heat transfer, thermophysical properties of hydrogen under ultra-high pressure, micro-refrigerators, micro heat transfer devices, and numerical simulation of thermal-fluid phenomena.

Art

HONGBIN MA



Hongbin Ma, Ph.D., Curators' distinguished professor and chair of mechanical and aerospace engineering at the University of Missouri,

is honored for significant contributions to the engineering applications of heat transfer, including oscillating heat pipe thermal control technology for defense, heat pipe computer cooling, and phase-change material drink-now mugs.

A globally recognized expert in thermal science and ASME Fellow, Dr. Ma has contributed widely to fundamental research and engineering applications for heat transfer. He has greatly advanced the collective understanding of supersonic flow and thermally excited oscillation heat transfer, as well as pioneering innovations in heat pipes, oscillating heat pipes, and phase-change thermal systems. Dr. Ma is a prolific researcher, with over 190 publications, 15 patents, and sustained funding from major sources including the NSF and DARPA.

Mayo D. Hersey Award

MITJAN KALIN



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.

Mitjan Kalin, P.D. professor of mechanical engineering at the University of Ljubljana, Slovenia, is recognized for sustained and transformative research on the fundamental and practical areas of tribology that has significantly impacted the efficiency, reliability, and environmental compatibility of moving mechanical systems.

An internationally renowned engi-

neer, Dr. Kalin is a recognized expert in wear and friction mechanisms of advanced materials and surface coatings with particular focus on lubrication, tribochemistry, and experimental contact mechanics. His substantial research output includes over 220 peer-reviewed publications and over 80 invited lectures. He is the prior recipient of many recent awards, including the ASME Burt L. Newkirk Award. He currently leads the Laboratory for Tribology and Interface Nanotechnology at Ljubljana.

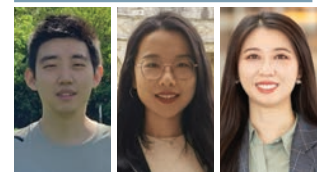
Henry Hess Early Career

Publication Award

ZHI ZHAO

CHAO WANG

XIAOJIA SHELLEY ZHANG



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

Zhi Zhao, Ph.D. candidate in civil and environmental engineering at the University of Illinois at Urbana-Champaign; Chao Wang, Ph.D. candidate in civil engineering at the University of Illinois at Urbana-Champaign; and Xiaojia Shelly Zhang, Ph.D., David C. Crawford faculty scholar and assistant professor of civil and environmental engineering at the University of Illinois at Urbana-Champaign are honored for the paper titled "Tuning Buckling Behaviors in Magnetically Active Structures: Topology Optimization and Experimental Validation."

Zhi Zhao's current research combines topology optimization and experimental validation of magneto-mechano-electric materials and architected structures for applications in actuation, energy harvesting and dissipation, and biomedicine. He has also contributed to review efforts on educational structural optimization codes and multiphysics topology optimization frameworks.

Chao Wang's research on the inverse design of smart and stimuli-responsive structures through multiphysics and multi-material topology optimization, integrating theoretical modeling, numerical simulation, and experimental validation via additive manufacturing. She has contributed extensively as well to several NSF-

and DARPA-funded projects, taking significant roles in research planning, reporting, and dissemination.

Dr. Shelly Zhang directs the MISSION (Multi-functional Structures and Systems design Optimization) Laboratory at Illinois. Her research explores topology optimization, inverse design, 3D/4D printing, and data-driven models to develop multifunctional, sustainable, and resilient materials, structures, and robots for applications at different scales. She is the recipient of an NSF CAREER Award, the ASME *Journal of Applied Mechanics* Award, and the DARPA Young Faculty Award, among others. Dr. Zhang currently serves as a review editor for the *Journal of Structural and Multidisciplinary Optimization* and an associate editor for the *Journal of Applied Mechanics*.

Patrick J. Higgins Medal

WILLIAM M. SMITH JR.



The Patrick J. Higgins Medal recognizes an individual who has contributed to the enhancement of standardization for ASME Standards and Engineering Services. It was established in 2007 in remembrance of ASME's past vice president of the standardization department.

William M. Smith, executive director and CEO of the American Society of Plumbing Engineers (ASPE), is recognized for extensive experience and leadership in plumbing safety, including contributions to plumbing engineering, product standards, and building codes, prioritizing public health, safety, and efficiency in the industry.

A member of the ASPE since 1993, Mr. Smith has been among the organization's leadership since 2002. He variously served as the society affiliate liaison, vice president, and chair of the exhibitors advisory committee, and was elected Fellow of ASPE in 2012. He is the prior recipient of the ASPE Distinguished Service Award.

Soichiro Honda Medal

PETER KELLY SENECAI



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

Peter Kelly Senecal, Ph.D., co-founder of Convergent Science, is honored for revolutionary work on the use of computational fluid dynamics to de-

sign transportation propulsion systems, leading to the widespread adoption of analysis-led design in industry.

In addition to his work at Convergent Science, Dr. Senecal holds a visiting professorship at the University of Oxford and directs the Computational Chemistry Consortium (C3). Dr. Senecal is a Fellow of ASME, the Society of Automotive Engineers, and the Combustion Institute. He is the recent recipient of the ASME ICE Award, the SAE John Johnson Diesel Engine Research Medal, the ASME Dedicated Service Award, and the University of Wisconsin Alumni Association Luminary Award. He is also a recipient of the Independent Press Award for Environment for co-authoring the book *Racing Toward Zero: The Untold Story of Driving Green*.

Internal Combustion Engine Award

AVINASH K. AGARWAL



Established in 1966, the Internal Combustion Engine Award 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.

Avinash K. Agarwal, Ph.D., director and professor at the Indian Institute of Technology – Jodhpur, is honored for pioneering contributions to internal combustion engines, including optical diagnostics, laser ignition, conventional and renewable fuels, microscopic and macroscopic spray characterization, emissions and particulate control, lubricating oil tribology, and prototypes for methanol and dimethyl-ether-fueled engines.

Among his many distinguished achievements, Dr. Agarwal is renowned for his efforts in establishing IIT-Kanpur's engine research laboratory and his prolific research output, totaling over 550 peer-reviewed papers, 80 edited collections, and 129 book chapters. He is a Fellow of ASME and the prior recipient of the Sir J. C. Bose National Fellowship, the Shanti Swarup Bhatnagar Prize, and the Rajib Goyal Prize, among others.

Maan Jawad Boiler and Pressure Vessel Code Award

SHIGERU TAKAYA



The Maan Jawad Boiler and Pressure Vessel Code Award, established in 2023, is intended to honor volunteers on the ASME Boiler and Pressure Vessel Code Committees who spend time taking a complicated technical sub-

ject and simplifying it for use in the ASME Boiler and Pressure Vessel Code.

Shigeru Takaya, Ph.D., principal researcher at the Japan Atomic Energy Agency, is honored for significant contributions to the development of boiler and pressure vessel codes for evaluating risk in the context of safety and reliability for high-temperature, liquid-metal, next-generation nuclear power plants.

An ASME Fellow with over 20 years of research and development experience, Dr. Takaya is a well-regarded expert in the areas of structural integrity evaluation, maintenance technologies, design optimization, and in-service inspection. At present, he serves as the chair of the nuclear power subcommittee of the Japan Society of Mechanical Engineers.

Johnson & Johnson Consumer Companies, Inc. Medal

SOLOMON ADERA



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 promote inclusiveness of all people.

Solomon Adera, Ph.D., assistant professor of mechanical engineering at the University of Michigan, is recognized for excellence in research, teaching, mentoring, and professional contributions to ASME, InterPACK, and ITherm Conferences; and for extensive, distinguished service to students.

Previously a postdoctoral researcher at Harvard University, Dr. Adera is also the recent awardee of the ASME K-16 Outstanding Faculty Career in Thermal Management Award and an NSF CAREER Award. His current research interests include heat and mass transfer, phase-change, and fluid-structure interactions.

Duane P. Jordan Early Career Award

RICHARD L. HOLLENBACH III



Established in 1994, the Duane P. Jordan Early Career Award recognizes outstanding early career engineers who have advanced quickly in their professional careers, have participated in advancing their education, have shown leadership in ASME activities, and have volunteered actively in their communities.

Richard L. Hollenbach III, Ph.D., P.E., senior engineer in Thermal Sciences

at Exponent Scientific and Engineering Consulting, is honored for growth as a recognized engineering expert through advanced academic degrees and professional certifications; for the successful completion of multiple leadership programs within the engineering community; and for extensive local and international volunteer activity.

Dr. Hollenbach is active in the profession and various societies, including ASME, AIAA, and the Tau Beta Pi Engineering Honor Society. He is a well-regarded expert in the field, having reviewed technical articles for Turbo Expo, the Global Power and Propulsion Society, and the International Symposium on Unsteady Aerodynamics, Aeroacoustics, and Aeroelasticity of Turbomachines.

Warner T. Koiter Medal

JEAN-BAPTISTE LEBLOND



The Warner T. Koiter Medal was established in 1996 to recognize distinguished contributions to the field of solid mechanics with special emphasis on the effective blending of theoretical and applied elements, and on a high degree of leadership in the international solid mechanics community.

Jean-Baptiste Leblond, Ph.D., professor emeritus at Sorbonne University, is recognized for important analytical and numerical contributions to the field of fracture mechanics in both brittle and ductile materials, helping to predict propagation of cracks and crack paths in complex structures.

Dr. Leblond is best known for his work on transformation plasticity of metals and alloys, brittle fracture, and ductile fracture, but his research interests also include phase transformations of steels, finite element simulations of thermomechanical treatments, problems of nonlinear diffusion in solids, and advanced numerical methods in solid mechanics.

Robert E. Koski Medal

ADOLFO SENATORE



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.

Adolfo Senatore, professor of engineering at the University of Naples

Federico II, is honored for years of outstanding leadership in fluid power research; for persistent efforts to promote international relationships between experts and researchers; and for extensive contributions related to fluid power education.

A member of the Order of Engineers of the Province of Naples, Prof. Senatore has supervised over 800 student theses. He is a well-regarded expert in fluid power and carries a long record of academic service, including the presidency of the degree course council in mechanical engineering, board member of the doctoral school in industrial engineering, and teaching coordinator of engineering faculty at the University of Naples.

Frank Kreith Energy Award

EVELYN N. WANG



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. The award was established by the Solar Energy and Advanced Energy divisions to honor Dr. Frank Kreith's contributions to solar energy and heat transfer.

Evelyn N. Wang, Ph.D., inaugural vice president for energy and climate and the Ford professor of engineering at the Massachusetts Institute of Technology, is honored for pioneering contributions to thermophotovoltaic devices, transparent insulation, and atmospheric water harvesting using solar energy.

Dr. Wang previously served as the Director at the Advanced Research Projects Agency – Energy, where she led the agency's development, launch, and execution of high-risk, high-reward energy research and development programs. Dr. Wang is a Fellow of ASME, the American Association for the Advancement of Science, and the American Academy of Arts and Sciences.

James N. Landis Medal

FREDERICK J. MOODY



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.

Frederick J. Moody, Ph.D., former nuclear safety design engineering consultant at General Electric and adjunct professor of mechanical engineering at San Jose State University, is recognized for pioneering contributions to predic-

tive methods for the analysis of steady and unsteady thermo-fluid problems, particularly reactor accident and containment design involving two-phase flow and impact forces on vessel and piping systems.

A Fellow of ASME, Dr. Moody is a well-regarded expert in nuclear safety. His analyses have helped generate preventative designs and mitigating procedures to protect the public from radiation exposure, as well as the now industry-standard "Moody Blowdown Model." In retirement, Dr. Moody continues his consultant work on various projects, both domestic and international.

Bernard F. Langer Nuclear Codes and Standards Award

FRANK J. SCHAAF JR.



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.

Frank J. Schaaf Jr., P.E., retired engineering consultant, is recognized for dedicated service and leadership in the development, improvement and promotion of ASME nuclear codes and standards, including provisions for in-service inspection requirements, high-density polyethylene piping, and high-temperature advanced reactors.

With decades of experience in the industry, particularly in the area of code cases, Mr. Schaaf is the prior recipient of multiple accolades, including a JSME high distinction award and the Nuclear Energy Institute TIP Award. Mr. Schaaf is also a Fellow of ASME.

Wilfred C. LaRochelle Conformity Assessment Award

PAUL A. WILLIAMS



The Wilfred C. LaRochelle Conformity Assessment Award, established in 2017, recognizes distinguished service in the area of conformity assessment including, but not limited to, the establishment, advancement, and promotion of the Society's product and personnel certification and accreditation programs.

Paul A. Williams, director and principal consultant at Quality and Regulatory Compliance Solutions Limited, is honored for exemplary service to conformity assessment in establishing and advancing certification and accredita-

tion programs, and for outstanding performance, invaluable insights, and demonstrated leadership on numerous projects related to codes and standards.

With over 40 years of experience within aerospace, defense, ATEX, and general manufacturing industries, Mr. Williams is well-regarded internationally for his regulatory expertise across industries. He has served as a representative on multiple international, European, and ASME committees, including the ASME QPS working group that led to the initial publication of the 2021 QPS standard. He received the Board on Conformity Assessment Dedicated Service Award in 2022.

Gustus L. Larson Memorial Award

KEJIE ZHAO



The Gustus L. Larson Memorial Award was established in 1974 to honor an ASME Fellow and founder of Pi Tau Sigma. It is awarded to the engi-

neering graduate who has demonstrated outstanding achievement in mechanical engineering within 10 to 20 years following receipt of their bachelor's degree.

Kejie Zhao, Ph.D., professor of mechanical engineering and university faculty scholar at Purdue University, is honored for outstanding achievements in mechanical engineering within 10 to 20 years following graduation.

At Purdue since 2014, Dr. Zhao's research group currently focuses on chemomechanics of electrochemically active materials using experimentation and multi-scale modeling approaches. He has been named Fellow of ASME and is a prior recipient of the NSF CAREER Award and the J. W. Dally Young Investigator Award, among others. He currently serves as an associate editor of *Applied Mechanics Reviews* and as a technical editor of *Experimental Mechanics*.

H. R. Lissner medal

KAI-NAN AN



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.

Kai-Nan An, professor emeritus at the Mayo Clinic College of Medicine and Science, is honored for pivotal developments in experimental and analytical methods to quantify and model the human musculoskeletal system, and for profound clinical impacts on joint

replacement and soft tissue repair.

Over 40 years at the Mayo Clinic, Dr. An's research contributed to major breakthroughs in several key areas, including soft tissue healing and repair, novel joint implant design and surgical planning, and advanced imaging techniques. Dr. An has mentored over 300 postdoctoral fellows, engineers and physicians alike, from six continents. For his many contributions to engineering and medicine, Dr. An has been awarded the Muybridge Award, been named both a distinguished investigator and distinguished alum of the Mayo Clinic, and received the Borelli Award from the American Society of Biomechanics.

Machine Design Award

QIAODE J. GE



The Machine Design Award, established in 1958, recognizes eminent achievement or distinguished service in the field of machine design.

Qiaode J. Ge, Ph.D., professor of mechanical engineering at Stony Brook University, is honored for pioneering contributions to mechanical engineering, particularly in the modeling of displacement, computational kinematic geometry, and data-driven mechanism analysis and synthesis, significantly advancing several key areas of design.

A Fellow of ASME, Dr. Ge is the recipient of multiple prior honors, including the ASME Dedicated Service Award, the ASME A.T. Yang Memorial Award for Theoretical Kinematics, and the ASME Mechanisms and Robotics Award. Currently, Dr. Ge is editor-in-chief of the ASME Letter in Translational Robotics. Previously, he served as associate editor of the ASME *Journal of Mechanical Design* and the ASME *Journal of Mechanisms and Robotics*.

Charles T. Main Student Leadership Awards

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

Gold

GOPIKA A.K. PILLAI



Gopika A.K. Pillai, mechanical engineering student at Mar Athanasius College of Engineering (MACE), is honored for exceptional leadership,

technical innovation, and dedication to engineering education, community outreach, and project execution.

Ms. Pillai currently serves as chair of the student chapter at MACE, where she previously served as joint secretary and then secretary. She has led many technical workshops, community outreach sessions, and multiple grant winning initiatives related to CAD education and cyber security. Ms. Pillai also spearheaded efforts to host MACE's first ASME EFx and launch a podcast platform to highlight engineering student voices.

Silver

ADHIGA M S



Adhiga M S, mechanical engineering graduate from the Government Engineering College – Barton Hill, Kerala, India, is honored for exemplary leadership in organizing and coordinating events, and for unparalleled documentation skills in various design projects within and beyond ASME.

The immediate past chair of Barton Hill student section, Adhiga is a recent technical award winner from EFx India. In addition to her chair position, Adhiga was head of documentation for Team Pravega, a student project team representing Barton Hill in the international Shell Eco-marathon. Team Pravega was awarded the DuPont Safety Award and the SwRI Technical Innovation Award for their efforts.

McDonald Mentoring Award

GUILLERMO AGUILAR



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

Guillermo Aguilar, Ph.D., James and Ada Forsyth professor and department head of the J. Mike Walker '66 department of mechanical engineering at Texas A&M University, is honored for exceptional mentorship, guidance, and support, fostering professional and personal growth for engineering students and researchers.

With A&M since 2021, Dr. Aguilar is a well-regarded expert in laser-tissue interactions, biomedical optics, and materials laser processing. He has co-authored more than 115 journal publications and advised more than 160 students at all levels. He is a Fellow of ASME, the American Society for Lasers in Surgery and Medicine, and

the American Institute for Medical and Biological Engineering, and a Member of the National Academy of Engineering of Mexico.

M. Eugene Merchant Manufacturing Medal of ASME/SME

KEITH J. KRACH



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.

Keith J. Krach, chairman and co-founder of the Krach Institute for Tech Diplomacy at Purdue University, is honored for exceptional technological contributions and innovations in supply chain management that have transformed the manufacturing sector.

Mr. Krach is renowned for transformational leadership in the areas of engineering software, e-commerce, higher education, philanthropy, and economic statecraft. He has served in many eminent leadership positions, including being named the youngest-ever VP at General Motors, COO of Rasna, and chair and CEO of Ariba, chair of the Purdue University board of trustees, and chair and CEO of DocuSign, which became the world's most-trusted enterprise software company, according to Newsweek, with over one billion users. His work on national security and technology led him to become a Nobel Peace Prize nominee in 2022.

Van C. Mow Medal

YONGJIE JESSICA ZHANG



The Van C. Mow Medal, established by the ASME Bioengineering Division in 2004, 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.

Yongjie Jessica Zhang, Ph.D., George Tallman Ladd and Florence Barrett Ladd professor of mechanical engineering and biomedical engineering at Carnegie Mellon University, is honored for pioneering contributions to novel algorithms of image-based geometric modeling, isogeometric analysis, multiphysics, and data-driven modeling to simulate neuron material transport, traffic regulation and growth,

and cardiovascular systems; and for leadership in the computational bioengineering profession.

A Fellow of ASME, Dr. Zhang is a known expert in computational geometry, isogeometric analysis, finite element method, data-driven simulation, image processing, and their biomedical and engineering applications. She has co-authored over 240 peer-reviewed publications and received several best paper awards. She is a recent recipient of the AWM-SIAM Sonia Kovalevsky Lecture Award, an NSF CAREER Award, and the USACM Gallagher Young Investigator Award. She currently serves as editor-in-chief of *Engineering with Computers*.

Nadai Medal

VIKRAM DESHPANDE



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

Vikram Deshpande, Ph.D., professor of materials engineering at Cambridge University, is recognized for pioneering contributions to the modeling of active materials, including the development of bio-chemo-mechanical frameworks to elucidate cellular responses, and for advancements in the understanding of failure mechanisms in lithium-ion batteries through innovative experiments and theoretical insights.

Before joining Cambridge, Dr. Deshpande was a member of the faculties of the University of California, Santa Barbara and the Technical University of Eindhoven. He currently serves as editor-in-chief of the *Journal of the Mechanics of Solids* and is a prior awardee of the Rodney Hill Prize in Solid Mechanics, the Prager Medal and the ASME Koiter Medal. He has been elected Fellow of the Royal Society and the Royal Academy of Engineering.

Sia Nemat-Nasser Early Career Award

GRACE X. GU



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.

Grace X. Gu, Ph.D., assistant professor of mechanical engineering at the

University of California, Berkeley, is honored for innovative work that elucidates the interplay between microstructure and mechanical properties essential for the design of advanced composite materials, and for inspiring the next generation of students to further the study of composites.

Dr. Gu's research group focuses on designing composite materials with superior properties for mechanical, biological, and aerospace applications using computational modeling and machine learning, as well as developing intelligent additive manufacturing processes to realize complex material designs. For these and earlier efforts, she is the recipient of many prior awards and has delivered dozens of invited lectures and seminars, including TEDxBerkeley.

Robert M. Nerem Education and Mentorship Medal

ALAN W. EBERHARDT



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.

Alan W. Eberhardt, Ph.D., professor and associate chair of education at the University of Alabama at Birmingham, is honored for transformative leadership and mentorship of hundreds of undergraduate and graduate students in clinical and industrial settings with applications for medical devices and products to aid the disabled.

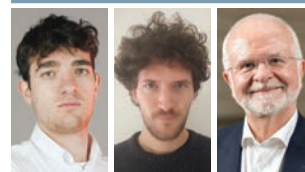
With the UAB faculty since 1991, Dr. Eberhardt has an extensive record of grant and award winning related to his work with physical and occupational therapists as well as individuals with disabilities. For over twenty years he has received NSF research funding through the Research to Aid Persons with Disabilities program, and he is a three-time winner of NIH R25 award funding to expand the scope of his and his students' work into general medical devices.

Edward F. Obert Award

ENRICO DAL CIN

GIANLUCA CARRARO

GEORGE TSATSARONIS



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.

Enrico Dal Cin, Ph.D., research fellow at the University of Padova, Italy; Gianluca Carraro, Ph.D., engineering researcher at the University of Padova, Italy; and George Tsatsaronis, Ph.D., Bewag professor emeritus of energy engineering and environmental protection at the Technical University of Berlin, Germany, are recognized for the paper titled “A Two-Level Optimization Approach for the Synthesis, Design and Operation of Multi-Energy Systems Integrated with Energy Networks.”

Dr. Dal Cin’s research interests currently reside in design optimization and operation of thermal power plants and distributed multi-energy systems. He has published twelve papers in international peer-reviewed journals and nine papers in international conference proceedings.

Dr. Carraro is currently engaged in research on integrated optimization of multi-energy systems and is the author of forty papers across peer-reviewed journals and conference proceedings. He was a recent guest editor for the journal *Energies*.

A Fellow of ASME, Dr. Tsatsaronis has more than fifty years of experience in research and teaching in the fields such as combustion technology, power plant technology, energy-conversion processes, energy systems design and decarbonization methods. He has been a principal investigator on research projects sponsored by the U.S. Department of Energy, the U.S. Electric Power Research Institute, the German Research Foundation, the European Union, and various German ministries and organizations.

Rufus Oldenburger Medal

HASSAN K. KHALIL



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.

Hassan K. Khalil, Ph.D., distinguished professor emeritus at Michigan State University, is honored for contributions to nonlinear control theory, nonlinear observers, output feedback control of nonlinear systems, and multi-time-scale methods.

With multiple decades in the field, Dr. Khalil has published over 125 journal papers, five books, and has consulted for corporations such as General Motors and Delco Products. He is a renowned expert in his field and the recipient of many prior honors, includ-

ing several for his teaching efforts, such as the recent Withrow Teaching Excellence Award from MSU. He has served as associate editor for the IEEE *Transactions on Automatic Control*, *Neural Networks*, and *Automatica*, for which he has also served as editor. He is a Fellow of the IFAC and IEEE.

Outstanding Student Section Advisor Award

MANOHAR CHIDURALA



The Outstanding Student Section Advisor Award, established in 1990 as the Faculty Advisor Award, recognizes the leadership and service qualities of an ASME Student Section Advisor who has completed at least three academic years in that role.

Manohar Chidurala, Ph.D., instructor II of engineering at Western Kentucky University, is honored for exceptional leadership, mentorship, and dedication that have transformed Western Kentucky University’s ASME student section; for fostering an inclusive, collaborative, and empowering environment for professional development; and for extensive work establishing community engagement opportunities.

Dr. Chidurala’s leadership extends to mentoring undergraduate students, advising senior design projects, and supporting research initiatives, including Faculty Undergraduate Student Engagement (FUSE) projects. He has contributed to multiple peer-reviewed publications and conference presentations and brings ample industry experience as a mechanical and design engineer to his teaching and mentorship.

Performance Test Codes Medal

MITCHELL JOHNSON



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.

Mitchell Johnson, president of JMS Southeast, Inc., is honored for outstanding and continuous leadership, achievements, and contributions to ASME performance test codes, and for related work in the areas of temperature measurement, pressure measurement, and thermowells.

Mr. Johnson is well-regarded in particular for his work on the ASME performance test code 19.3 (temperature measurement) and bioprocessing equipment. He is a prior recipient of

an ISA award for excellence in technical presentation and was previously named a “Control Engineering Leader Under 40.” He remains active in ASME and multiple other professional organizations.

Pi Tau Sigma Gold Medal

MATTHEW POWELL-PALM



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.

Matthew Powell-Palm, Ph.D., assistant professor of engineering, materials science, and biomedical engineering at Texas A&M University, is honored for outstanding achievements in mechanical engineering within ten years of graduation.

Dr. Powell-Palm works broadly on problems of materials and biological thermodynamics and is a widely-recognized expert on the behavior of water related to the cryopreservation of transplantable organs to the reduction of post-harvest food waste and the search for extraterrestrial life. He has authored nearly fifty peer-reviewed publications, holds several patents, is a recent recipient of the Dayong Gao Young Investigator Award from the Society for Cryobiology, and is the co-founder of the medical technology startup BioChoric, Inc.

James Harry Potter Gold Medal

JAY P. GORE



The James Harry Potter Gold Medal was established in 1980 to recognize eminent achievement or distinguished service in the science of thermodynamics and its applications in mechanical engineering.

Jay P. Gore, Ph.D., Reilly university chair professor of combustion engineering at Purdue University, is honored for the discovery of big-data-based exergy efficiencies in the optimal operation of Rankine-cycle-based power plants, and for extensive contributions to the emerging fields of big data, convolutional neural networks, machine learning, and AI in physics-based models of energy.

Dr. Gore is the prior associate dean for research and entrepreneurship in the college of engineering and the prior director of the Energy Center in Discovery Park at Purdue. He has advised over 35 doctoral dissertations and over 50 master’s theses. A Fellow of ASME,

in 2023, Dr. Gore delivered the Arden Bement lecture at Purdue.

Prime Movers Committee Award

SHARAD N. PACHPUTE

JASON C. LEE



Established 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.

Sharad N. Pachpute, Ph.D., CFD engineer at Zeeco India Pvt., Ltd., and Jason C. Lee, P.E., manager of fuel equipment engineering at Babcock Power Services, are honored for the paper titled “Performance Evaluation of Tangentially Fired Boiler Utilizing Hydrogen Enriched Natural Gas Fuel.”

In addition to his industry work, Dr. Pachpute has an active publication record, with more than a dozen research publications and over 120 citations registered on Google Scholar. He is an alum of IIT Delhi.

Jason C. Lee has over 20 years of experience in the power generation industry with significant experience in areas such as project engineering and management, thermal performance engineering, and boiler heat transfer and performance design.

Dixy Lee Ray Award

ARMISTEAD RUSSELL



The Dixy Lee Ray Award, established in 1998, recognizes significant achievements and contributions in the broad field of environmental protection. It honors not only those who have contributed to the enhancement of environmental protection and engineering, but also those who have contributed to other disciplines where accomplishments have indirectly impacted environmental protection.

Armistead (Ted) Russell, Ph.D., Howard T. Tellepsen chair of civil and environmental engineering and regents’ professor at the Georgia Institute of Technology, is recognized for impactful research in air pollution modeling and its applications for effective policy and improving air quality and human health; for exceptional leadership in environmental education; and for exemplary service to society in the pursuit of environmental quality.

Dr. Russell is a well-regarded ex-

pert, with research that has led to significant advancements in understanding the dynamics of air pollutants and assessing their impacts on health and the environment. He has been a member of the U.S. Environmental Protection Agency's Clean Air Science Advisory Committee (CASAC) and has served on 15 National Academy Committees, chairing six of them.

Charles Russ Richards Memorial Award

JULIO M. OTTINO



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.

Julio M. Ottino, Ph.D., R.R. McCormick Institute professor and Walter P. Murphy professor of engineering at Northwestern University, is recognized for outstanding achievements in mechanical engineering for 20 years or more following graduation.

Dr. Ottino is recognized as the world leader in the field of mixing of fluids and granular matter. He is the former dean of engineering, founder and co-director of the Northwestern Institute on Complex Systems, and currently, in addition to his positions among the engineering faculty, serves as professor of management and organizations in the Kellogg School of Management at Northwestern. He has been awarded the Gordon Prize for Innovation in Engineering and Technology Education and was previously named a Guggenheim Fellow.

Safety Codes and Standards Medal

RONALD KOHNER



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.

Ronald Kohner, P.E., past president of Landmark Engineering Services, LLC, is honored for significant advancements in the requirements and recommendations for safe construction, inspection, maintenance, and operation of mobile cranes and lifting devices, and for promoting consistency in regulatory requirements.

Mr. Kohner has significant experience across industries in the areas of

design, testing, and regulation. Prior to his tenure at Landmark Engineering, where he specialized in project support and accident investigation, Mr. Kohner served nearly two decades in crane design, testing, and application support at American Hoist & Derrick Co. He has authored crane and lifting management safety publications, developed operator certification programming, and authored numerous safety-related articles for industry magazines.

Milton C. Shaw Manufacturing Research Medal

YONG HUANG



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

Yong Huang, Ph.D., professor of mechanical and aerospace engineering at the University of Florida, is honored for experimental and theoretical contributions to the knowledge of process physics and printing-induced cell injury in jet- and extrusion-based printing.

Prior to joining the faculty at Florida, Dr. Huang served as faculty at Clemson University. His current research interests include dynamic material behavior and process-induced damage or defect structures during manufacturing, and the printing and machining of biological and engineering materials for multiple applications. He has received various awards for his manufacturing research contributions, including the Blackall Machine Tool and Gage Award, the SME Outstanding Young Manufacturing Engineer Award, and the SME Albert M. Sargent Progress Award. He is a Fellow of ASME since 2011.

Lakshmi Singh Early Career Leadership Award

AMY MENSCH



The Lakshmi Singh Early Career Leadership Award, established in 2020, recognizes a female engineer who has demonstrated considerable leadership in, commitment to, and continued service with ASME.

Amy Mensch, Ph.D., mechanical engineer at the National Institute of Standards and Technology (NIST), is honored for contributions to the profession through both service and leadership, and for continued efforts in attracting and mentoring those in STEM fields.

A specialist in fire safety research,

Dr. Mensch has been with the NIST for over a decade, developing renowned experience in smoke and soot dynamics, firebrand ignition, and the thermal performance of fire fighter protective equipment. In addition to the Singh award, Dr. Mensch is the recent recipient of the Penn State Mechanical Engineering Society Outstanding Early Career Award and the Washington Academy of Sciences Young Investigator Award. She currently serves as vice chair of the ASME scholarship committee.

Ruth and Joel Spira Outstanding Design Educator Award

AMARESH CHAKRABARTI



The Ruth & 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.

Amaresh Chakrabarti, Ph.D., senior professor and department chair in the design and manufacturing department at the Indian Institute of Science, is recognized for significant contributions to design education around the world through the development of innovative teaching and research programs, and for leadership in the global design community.

An author of 36 books, 350 peer-reviewed articles, and 13 patents, Dr. Chakrabarti is a well-regarded expert in design research. He has served as an area editor for *Research in Engineering Design* and a regional editor for the *Journal of Remanufacturing*. He is the co-founder of ICoRD, the first Indian international conference series on research in design and has been elected to the advisory board and managing board of the Design Society in the UK.

Spirit of St. Louis Medal

STEPHEN W. TSAI



The Spirit of St. Louis Medal was established in 1929 by Philip D. Ball, ASME members and citizens of St. Louis. It is awarded for meritorious service in the advancement of aeronautics and astronautics.

Stephen W. Tsai, D. Eng., professor emeritus at Stanford University, is honored for pioneering contributions to the field of composites, including the development of the Tsai-Wu Failure criterion, double-double laminates for high performance composites, and for conducting online workshops and conferences.

With Stanford since 1990, Dr. Tsai's early works included the Tsai-Hill and Tsai-Wu failure criteria, lamination parameter plots, and invariant transformation relations. He founded the *Journal of Composite Materials* in 1967 and co-authored *Introduction to Composite Materials* in 1980. The impact of his research has extended far beyond retirement, with major developments such as those in laminate stiffness stemming from his groundbreaking work. He continues to host online workshops through Stanford and continues to pursue breakthroughs in composites.

J. Hall Taylor Medal

JIMMY E. MEYER



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.

Jimmy E. Meyer, P.E., principal engineer at CDM Smith, is recognized for outstanding leadership and technical contributions to ASME Codes and Standards, advancing the B31 Pressure Piping Standards and developing standards for hydrogen service that have driven significant technical advancement.

With 52 years of experience in refining petrochemical, chemical, power generation and industrial facilities, Mr. Meyer is a renowned expert in overall project management, pressure equipment, design, analysis, specification, and system requirements. He has led significant efforts in ASME Standards and Piping related to B31 Standards related to power and process piping and recently pivoted to teaching ASME courses related to piping codes across the world.

Robert Henry Thurston Lecture Award

GANG BAO



The Robert Henry Thurston Lecture Award, 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.

Gang Bao, Ph.D., Foyt Family professor at Rice University, is honored for outstanding and sustained contributions to the mechanics of composites, cell mechanics, biotechnology, and nanomedicine.

A Fellow of ASME, Dr. Bao has held multiple distinguished faculty positions, including the Robert A. Milton professorship at the Georgia Institute of Technology, the directorship in pediatric nanomedicine at the Children's Hospital of Atlanta and, more recently, the co-directorship of the Cancer Bioengineering Collaborative at Rice University. His ample research record has generated significant discoveries related to the mechanics of composites, cells and biomolecules, the synthesis and application of magnetic nanoparticles, and the design of engineered nucleases for efficient and specific genome editing.

Timoshenko Medal

NORMAN A. FLECK



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.

Norman A. Fleck, Ph.D., chartered engineer and professor at the University of Cambridge, is honored for significant contributions to the mechanics of materials, including non-local theories, multi-phase lattices, coupled solids, and high-performance composites, with direct engineering applications in areas such as aeroengines and defense.

Dr. Fleck's primary interest is in micromechanics, or the development of physically-based models of deformation and fracture of engineering materials by experiment, theory and numerical analysis. His work has had significant impact upon the theory and experimental underpinning of strain gradient plasticity and the invention, synthesis, property measurement and theory of micro-architected solids. Currently, he is working on the mechanics of solid-state lithium ion batteries.

Worcester Reed Warner Medal

XUE FENG



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

Xue Feng, Ph.D., professor at Tsinghua University, is honored for pioneering contributions to theoretical

and experimental mechanics of flexible film-substrate structure, including applications in strain engineering of nanoscale materials, flexible devices of high performance, and industrial scale production of micro-LEDs.

A Fellow of ASME, the Society of Engineering Mechanics, and the Society for Experimental Mechanics, Dr. Feng's research has been devoted to the fundamental theories of the mechanics of flexible structures and the development of flexible electronics. He has published nearly 300 papers in high-profile journals including *Nature*, *Science*, and *Nature Materials*, and his devices and technologies have been adopted by many companies and research institutions. He is also the founder of the International Conference of Flexible Electronics, a series of conferences now recognized as the most influential in flexible electronics.

George Westinghouse Gold Medal

KAI HONG LUO



The George Westinghouse Gold Medal was established in 1952 to recognize eminent achievement or distinguished service in the power field of mechanical engineering.

Kai Hong Luo, Ph.D., chartered engineer and professor of mechanical engineering at University College London, is honored for groundbreaking contributions to digital and AI-enhanced analysis, control, prediction, design and optimization of energy and power systems, leading to accelerated research and development, increased energy efficiency, lower emissions and carbon footprint, and improved sustainability.

Dr. Luo is an international authority in both physics-based and data-driven modeling methods that have had significant impact on analysis, prediction, design and optimization in power engineering. He founded and leads the UK Consortium on Mesoscale Engineering Sciences, where he and co-workers developed advanced and impactful mesoscopic and atomistic modeling and simulation methods and codes that have been adopted in commercial and open-source software.

Arthur L. Williston Medal

HASSAN KHAN



The Arthur L. Williston Medal, established in 1954, recognizes an engineering student or recent graduate for fostering civic service.

Hassan Khan, field engineer at Weatherfield Well Services, is honored for exceptional leader-

ship in engineering education, for securing industry partnerships and fostering STEM outreach via collaboration, and for inspiring future engineers through research symposiums and career guidance.

In his short tenure at Weatherfield, Mr. Khan has rapidly become a leader among his peers, leading global team presentations on risk and other various safety and team meetings in addition to his routine operations tasks. Prior to joining Weatherfield, Mr. Khan completed his undergraduate degree at Texas A&M University at Qatar where he won the Buck Weis Spirit Award, the CORE Values Award, and an undergraduate research award, and contributed to ASME workshops in the areas of additive manufacturing and materials.

Savio L-Y. Woo Translational Biomechanics Medal

UMUT A. GURKAN



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.

Umut A. Gurkan, Ph.D., Wilbert J. Austin professor of engineering at Case Western Reserve University, is honored for outstanding discoveries and inventions that have led to the translation and commercialization of point-of-care diagnostic technologies for sickle cell disease in underserved populations.

At Case Western, Dr. Gurkan leads the Case Biomanufacturing and Microfabrication Laboratory, leading collaborations across mechanical and aerospace engineering, biomedical engineering, and orthopedics. His research primarily involves microcirculation, vascular biology, and the development of microfluidic systems for diagnostics related to blood disorders, infectious diseases, and cancer. He has published over 110 peer-reviewed articles and holds 16 U.S. patents. He is a prior recipient of the NSF CAREER Award, several NIH and NHLBI awards, and has previously been named an *MIT Technology Review* Innovator Under 35.

Henry R. Worthington Medal

LUIS SAN ANDRÉS



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

Luis San Andrés, Ph.D., P.E., professor emeritus at Texas A&M University, is honored for groundbreaking analytical and experimental work on the performance and dynamic response of pump annular seals, advancing the stability of rocket engine turbopumps and engineered multiple phase pumps for the subsea oil and gas production industries.

A Fellow of ASME, Dr. San Andrés is the former Mast-Childs chair professor of mechanical engineering at Texas A&M, where he taught undergraduate and graduate courses in dynamics, sound and vibrations, and lubrication theory. Through 34 years of funded research at the Turbomachinery Laboratory, Dr. San Andrés and his students produced experimentally verified computational models of hybrid bearings and annular seals for rocket engine cryogenic fluid turbopumps, squeeze film dampers for aircraft engines, nonlinear dynamics of turbochargers, gas foil bearings for oil-free machinery, and multiple-phase flow seals for wet gas compressors and multiple phase pumps.

S. Y. Zamrik PVP Medal

ABDEL-HAKIM BOUZID



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.

Abdel-Hakim Bouzid, Ph.D., professor of engineering at École de Technologie Supérieure in Montreal, Quebec, is honored for pioneering technical research in the field of bolted joint assemblies found in pressure vessels and piping systems; for unwavering support for codes and standards development; for extraordinary service to the ASME Pressure Vessel and Piping Division; and for outstanding teaching and mentoring in the field.

Prior to joining the Tightness Testing Research Laboratory at the École de Technologie Supérieure in 1990, Dr. Bouzid worked in the nuclear industry for eight years specializing in pressure vessels and piping. He has authored or co-authored over 250 technical papers on different subjects including pressure vessels, stress analysis, bolted joints, valves, polymer and composites and biomechanics. Dr. Bouzid is a Fellow of ASME and has served as a member of multiple working groups and committees.