OUR MISSION
ASME’s mission is to advance engineering for the benefit of humanity.

OUR VISION
ASME’s vision is to be the premier resource for the engineering community globally.

OUR VALUES
In performing its mission, ASME adheres to these core values:

• Embrace integrity and ethical conduct
• Embrace diversity and respect the dignity and culture of all people
• Nurture and treasure the environment and our natural and man-made resources
• Facilitate the development, dissemination, and application of engineering knowledge
• Promote the benefits of continuing education and of engineering education
• Respect and document engineering history while continually embracing change
• Promote the technical and societal contribution of engineers

OUR CREDO
Setting the Standard…

• In Engineering Excellence
• In Knowledge, Community, and Advocacy
• For the benefit of humanity

TABLE OF CONTENTS

ASME Annual Report  PG. 4
ASME Foundation  PG. 8
Financials  PG. 24

1880  Year ASME was Established
100,000+  ASME Members
28,000+  ASME Student Members
20,000+  ASME Early Career Engineer Members
140+  Countries with ASME Members
3,800+  Active Volunteer Leaders
560+  ASME Standards
100+  Countries using the ASME Boiler & Pressure Vessel Code
VIRTUAL INDUSTRY EVENTS & CONFERENCES

As mentioned, ASME’s renowned Industry Events and Conferences programming shifted from the physical world to virtual. Remarkably, this change allowed greater access to ASME conference programming to more people around the world than ever before. We have seen truly robust levels of participation at a wide range of ASME virtual events – more than one might have imagined possible. This phenomenal response shows that ASME public programming was more than ready for its next chapter, and that virtual access to ASME programs provides a vital opportunity for many thousands around the world for whom traveling to participate was not an option.

NEXT GENERATION ENGINEERS CAPITAL CAMPAIGN

We are very pleased to report that, after much preparation, the ASME Foundation formally launched The Campaign for Next Generation Engineers Who Transform the World on July 1. To ensure success in what will be the most ambitious effort in its history – with a five-year goal to raise over $50 million – ASME Foundation Executive Director Kathleen Lobb recently completed recruitment of an extraordinary new team of development professionals to realize this vision. We are also very pleased to share that ASME Past President Keith Roe will serve this major effort as both chair of the ASME Philanthropy Committee and as chair of the Capital Campaign.

MEMBERSHIP PILOT INITIATIVE

In its continuing effort to deliver our members the most value possible, ASME’s Membership team launched an extensive pilot process – based on market research – to study the evolving needs and preferences of the many constituencies of ASME members. This extensive process is slated to continue throughout FY21 and into the first part of FY22. While still early in the pilot period, the ASME Membership team anticipates offering new and/or additional benefits along with some membership plan customization that will enable members to choose the benefits that best suit their needs each year. Once complete, the data collected via this targeted pilot program will inform the creation of a new membership framework to be rolled out to ASME’s membership worldwide.

DIVERSITY & INCLUSION

We are proud to report that ASME’s Board of Governors has now voted to broaden and formalize ASME’s Diversity & Inclusion efforts. Mindful of the Society’s responsibility to support the needs of all its constituents, the Board of

For 140 years, ASME’s efforts to advance the art and science of mechanical engineering for the benefit of humanity have been fueled by the expertise and the passionate commitment of our members and volunteers. Today, ASME serves a diverse global community of technical professionals who practice, teach, study, and share mechanical engineering expertise as the embodiment of mankind’s ambition to master the challenges of life on earth.

We know that 2020 will be remembered as an unprecedented year by everyone who experienced it. This year’s once-in-a-century events have challenged us, brought out the best in us as a global team and family, and even created unexpected opportunities. We are pleased to report that ASME continues to navigate the challenges of 2020 successfully and can proudly point to remarkable achievements in a host of areas.

NAVIGATING THE CRISIS

This past March, as it became apparent that the world was facing its first truly global pandemic in a century, ASME’s leadership took decisive action. ASME offices around the world – including our headquarters in New York City – closed almost immediately. ASME’s nearly four hundred plus staff members around the world pivot to real time to the work-from-home orientation that has become the world’s new normal. In less than a week, all of ASME’s work was being done in homes around the world, connected virtually to conform with new social-distancing guidelines and minimize transmission of the COVID-19 virus.
The ASME Foundation is committed to inspiring and supporting current and future generations of engineers with programs designed to help them achieve and succeed in creating lasting social impact.

Today more than ever, the world needs new ways to make our lives safer, healthier, and more sustainable. Engineers will bring these world-changing innovations to life. Through its comprehensive arc of programs, the ASME Foundation is dedicated to igniting a passion for engineering among the best and the brightest young minds and supporting them from early inspiration and learning to career engagement and transformational innovations.
BOARD OF DIRECTORS

Frank C. Adamek, P.E.
Chair
GE Oil & Gas (Retired)

Rudolf E. Landwaard, P.E.
Director
Consolidated Edison of NY (Retired)

Kenneth R. Bailey, P.E.
Director
Westinghouse Electric Co. (Retired)

Keith Roe, P.E.
Chair
Burns and Roe Group, Inc. (Retired)

Terry E. Shoup, P.E.
Vice Chairman
Santa Clara University

Jennifer R. Jewers Bowlin, P.E.
Henderson Engineers

Mahantesh S. Hiremath, P.E.
SC Solutions

Rudi E. Landwaard, P.E.
Consolidated Edison of NY (Retired)

Thomas D. Pestorius
H&P, Inc. (Retired)

Justin R. Young
Denmar Technical Services, Inc.

Kathleen M. Lobb
Executive Director, ASME Foundation
Managing Director, ASME Philanthropy

Robert T. Simmons, P.E.
Director
Princeton Plasma Physics Laboratory (Retired)

Rudolf E. Landwaard, P.E.
SC Solutions

Kathleen M. Lobb
Executive Director, ASME Foundation
Managing Director, ASME Philanthropy

Anand Sethupathy
Managing Director, ASME Programs

PHILANTHROPY COMMITTEE

Frank C. Adamek, P.E.
Chair
GE Oil & Gas (Retired)

Rudolf E. Landwaard, P.E.
Director
Consolidated Edison of NY (Retired)

Robert T. Simmons, P.E.
Director
Princeton Plasma Physics Laboratory (Retired)

Thomas Costabile, P.E.
Director
Executive Director/CEO, ASME

Kathleen M. Lobb
Executive Director, ASME Foundation
Managing Director, ASME Philanthropy

Thomas J. Meehan
Director
Treasurer, ASME Foundation

Mahantesh S. Hiremath, P.E.
SC Solutions

Rudi E. Landwaard, P.E.
Consolidated Edison of NY (Retired)

Ann Meehan
Director
Treasurer, ASME Foundation

Kathleen M. Lobb
Executive Director, ASME Foundation
Managing Director, ASME Philanthropy

Robert T. Simmons, P.E.
Director
Princeton Plasma Physics Laboratory (Retired)

Thomas D. Pestorius
H&P, Inc. (Retired)

Justin R. Young
Denmar Technical Services, Inc.

Kathleen M. Lobb
Executive Director, ASME Foundation
Managing Director, ASME Philanthropy

Anand Sethupathy
Managing Director, ASME Programs

Thomas Costabile, P.E.
Director
Executive Director/CEO, ASME
ASME FOUNDATION OVERVIEW

As the fundraising arm of the American Society of Mechanical Engineers, the ASME Foundation is charged with seeking donations to support a broad array of philanthropic initiatives aimed at fulfilling ASME’s mission to advance engineering for the benefit of humanity.

The past year was one of dramatic growth and change for the ASME Foundation, marked by several milestone accomplishments, including key additions to the leadership team; a new website and newsletter; a widely attended Philanthropic Impact event at IMECE; a reorganized Foundation Board and a newly established ASME Philanthropy Committee; and an approved plan for an ambitious, five-year capital campaign to fuel programs that empower the next generation of engineers.

Underpinning all this work is the determination to build tomorrow’s diverse and inclusive engineering workforce, where opportunity is more equitably extended to groups who are significantly underrepresented in the engineering profession.

For example, expanding our signature INSPIRE STEM Readiness program to more schools in economically disadvantaged districts around the United States is opening a window on the possibilities of an engineering career to thousands of school-age children. Our ASME Scholarships make an engineering education possible for promising college students for whom an engineering degree might otherwise be out of reach.

Successful events like ASME E-Fests® and ISHOW help engineering students and social impact entrepreneurs, respectively, advance their innovative designs. And when it launches next year, our new Career Engagement Center will connect both early-career and more seasoned engineers to opportunities for career path simulation, mentoring, volunteering, and fulfilling their potential in the profession.

One year ago, this report announced a new day for the ASME Foundation. On the following pages, you will glimpse what the past 366 new days have brought and all the good that results from generous support of the ASME Foundation.

Find out more about the ASME Foundation at www.asmefoundation.org.

CENTRAL TO THE FOUNDATION’S FUNDRAISING STRATEGY IS BUILDING AWARENESS OF ASME’S PROGRAMS IN THREE KEY AREAS:

- EDUCATION THAT INSPIRES, igniting a lifelong passion for engineering in K-12 through college and graduate school;
- CAREERS THAT MATTER, propelling early-career engineers toward a lifetime of meaningful work and engagement;
- IDEAS THAT INNOVATE, nurturing breakthrough ideas to improve quality of life in underserved communities.

COVID-19 RESPONSE: PIVOTING TO DIGITAL

Imagine that two of your most successful programs depend on bringing together hundreds of people from around the world, all organized into highly collaborative teams, to meet, compete, present ideas, and share information. Now imagine a global health emergency shutting down travel and large gatherings. What then?

If you are the ASME programs team, you pivot.

“…more than 300 universities in 47 countries logged into ASME’s first-ever all-digital E-Fest, and the E-Fest YouTube channel registered over 5,000 views during the event, and hundreds more since then.”

Led by Managing Director Anand Sethupathy, the ASME Programs Department reengineered its signature in-person ASME E-FESTS® for 100% online participation—then did it again for the acclaimed ASME ISHOW, too. With only weeks to plan and no existing model to rely on, these two highly successful programs, both fueled by ASME donors, somehow managed not only to meet their pre-pandemic goals but to exceed them.

A robust 1,775 unique registrants—largely college engineering students—representing more than 300 universities in 47 countries logged into ASME’s first-ever all-digital E-Fest, and the E-Fest YouTube channel registered over 5,000 views during the event, and hundreds more since then.

ASME’s Innovation Showcase (ISHOW) events are prestigious competitions where social impact entrepreneurs from around the world vie for access to seed capital, technical advice, and business guidance to scale their hardware prototypes to market-ready products. Typically held three times per year in Kenya, India, and the United States, all three 2020 ISHOWs were not only 100 percent online events, but easily as exhilarating and gratifying as any that preceded them.

“The overwhelming success of both E-Fest Digital and virtual ISHOW provides convincing evidence that future versions of these signature events will incorporate more online participation,” Sethupathy said. “What began as a response to the coronavirus pandemic actually enhanced access and engagement, providing valuable learning for future events.”

Find out more about ASME E-FESTS® and ISHOW at www.asmefoundation.org/programs/
CAPITAL CAMPAIGN UPDATE:
INTERVIEW WITH KEITH ROE

At its May 2020 meeting, the ASME Board of Governors unanimously approved a five-year capital campaign with the purpose of raising significant funds to expand existing philanthropic programs and develop a few new ones.

The fundraising effort, called the Campaign For Next Generation Engineers Who Transform the World, officially launched on July 1, 2020 with longtime ASME volunteer Keith Roe serving as Campaign Chairman. Mr. Roe is a past president of ASME and currently serves as Chair of the ASME Philanthropy Committee.

Why a capital campaign, and why now?

In the broadest sense, the purpose is to support and grow ASME’s charitable initiatives. Some of these are well known, like scholarships, E-Fests, and the Federal Fellows program, which has provided technical advice to federal government policymakers for the past 47 years. But the campaign also funds many other ASME outreach programs, such as the INSPIRE STEM education program that is provided free to hundreds of K-12 schools nationwide and is expanding to a million-plus students a year with our new collaboration with Discovery Education. In the Engineering for Global Development space, the campaign will support Engineering for Change (E4C), which develops research, knowledge, and solutions to local challenges in under-resourced communities. The Foundation also raises funds for ASME ISHOW, the Innovation Showcase that helps budding social entrepreneurs scale hardware prototypes.

There are plenty more examples of ASME Philanthropy, but a key priority for all of them is to build the engineering workforce of the future that includes more women, more people from underrepresented communities, and more engineers with multidisciplinary training to meet complex global challenges we increasingly face that engineers must help solve.

“Engineering is about solving problems, about making things better and improving everyone’s quality of life. That is what makes engineering so much fun and so rewarding.”

KEITH ROE, P.E.

How do you know these philanthropic programs are having the desired impact?

There are two ways: we know from data they are having the kind of impact we are expecting. We use metrics to track our programs and monitor results, and we are launching an SROI (Social Return On Investment) framework where we can more effectively measure social impact.

Beyond metrics, if you want a firsthand look at the results of our work, I recommend going to the ASME Foundation website and clicking on the “Our Impact” tab to find a number of inspirational videos that let beneficiaries’ stories in their own words.

What motivates you to be so involved with ASME philanthropy and the capital campaign?

For over 40 years, I gained a great deal from ASME in my career and my personal development. Between early learning and leadership opportunities to building strong personal and business relationships, I contributed to ASME but received much more in return. So, diving into the campaign is in part giving back, part paying it forward.

The second reason is even more important. Engineering is about solving problems, about making things better and improving everyone’s quality of life. That is what makes engineering so much fun and so rewarding. But today there are so many urgent challenges. And as these global challenges grow more and more complex, engineers are at the heart of solving them, advancing society, and further improving the quality of life around the world. That is exactly what ASME is all about—taking on complex challenges to benefit humanity. It is our mission!

ASME has great programs that help build the next generation of engineers. But implementing these programs requires an expanded and sustainable funding base to scale our programs and grow our ranks. What a wonderful opportunity it is to raise funds for such a great purpose and contribute to making a better world.

Keith Roe was president and CEO of Burns & Roe Group, a global engineering and construction company. He served as ASME president in 2016–2017.
DIVISIONS AND THE FOUNDATION COLLABORATE

In February, at the annual ASME Group Leadership Development Conference, Vicki Risinger presented to the group as chair of the Petroleum Division (PD) about the division’s multifaceted collaboration with the ASME Foundation. Her message: our division broadens our philanthropic impact by partnering with the ASME Foundation.

“At ASME, we believe that investing in the future of the engineering profession is a priority. Our division has been working with the ASME Foundation on various initiatives, and we’ve seen firsthand the positive impact that these collaborations can have on students and the engineering community.”

“With ASME, we have the opportunity to support STEM education, scholarships, and other programs that help to develop the next generation of engineers. We’ve recently established the Lakshmi Singh Early Career Leadership Award, which recognizes and supports exceptional female recipients. While the Foundation staff performs an initial sort of the applications, the PD Executive Committee approves the final list of nominees, ensuring that the criteria that were important to the PD were met.”

“For Division members who want a hands-on experience, ASME E-Fests® offer an opportunity to engage directly with college students as judges of an engineering competition, as hosts of a tabletop exhibit, or as volunteer mentors. Members also participate as judges, technical advisors, and mentors in ASME’s Bioengineering Division.”

VICKI RISINGER

When the PD elevated its scholarships program to the ASME Foundation, it carved out division-specific criteria and made the application available on ASME.org, increasing visibility to a global student audience. Among the criteria that were important to the PD were that scholarships be open to both undergraduate and graduate students in the U.S. and internationally, and that they address the underrepresentation of women in the field by targeting 50 percent or more of the funding to female recipients. While the Foundation staff performs an initial sort of the applications, the PD Executive Committee approves the final list of nominees, ensuring that the criteria that were important to the PD were met.

“The PD’s involvement extends to supporting an ASME Federal Fellow, who serves as a technical advisor to a federal government policymaker, and recognizing key members through Society-level awards, such as the recently established Lakshmi Singh Early Career Leadership Award.”

Both the PD and the Power Division are generous supporters of ASME’s INSPIRE STEM Readiness program.

PHILANTHROPIC IMPACT: CHANGING LIVES

Johane Bracamonte

When he was named the recipient of ASME’s 2020 Richard J. Goldstein Energy Lecture Award, Dr. James Truchard elected to donate his honorarium to the ASME Foundation to fund a scholarship for a deserving engineering student. That student is Johane Bracamonte, doctoral candidate in mechanical engineering at Virginia Commonwealth University (VCU) and a second-year student member of ASME.

“It is a great honor to receive the James Truchard Scholarship,” Bracamonte said. “It’s particularly meaningful and thrilling, since LabView and other National Instruments products have had an immeasurable impact on my professional career.” National Instruments, which Dr. Truchard co-founded and led as president and CEO, is a leading global provider of automated test equipment and virtual instrumentation software.

Bracamonte earned bachelor’s and master’s degrees in mechanical engineering at the Central University of Venezuela, where he used Dr. Truchard’s company’s products to modernize the school’s Thermodynamic Laboratories. Today, his research at the Engineered Tissue Multiscale Mechanics and Modeling Laboratory (ETM3) at VCU uses medical magnetic resonance imaging coupled to numerical simulation of cardiovascular mechanics to improve the understanding of cardiovascular diseases, their diagnosis, and treatment.

“It is reassuring being supported and recognized, but when the pat on the back comes from the hand of one of the world’s most prominent engineering entrepreneurs, it is not only an honor but also a challenge,” said Bracamonte. “Thanks to this scholarship, I feel inspired and compelled to excel in my studies and work.”

ASME’s Bioengineering Division (BED) focuses its philanthropic work on the engineering student community, where it funds student paper competitions at national conferences and subsidizes student attendance at important industry events. “Not to sound cliché, but it’s true; they’re the future of our division,” said Professor Kristen Billiar, principal investigator and department head at Worcester Polytechnic Institute and a leader of ASME’s Bioengineering Division.

For Division members who want a hands-on experience, ASME E-Fests® offer an opportunity to engage directly with college students as judges of an engineering competition, as hosts of a tabletop exhibit, or as volunteer mentors. Members also participate as judges, technical advisors, and mentors in ASME’s Innovation Showcase, or ISHOW, events. [See related story on how these events pivoted to digital experiences in response to the coronavirus pandemic.]

The ASME Foundation staff can be a valuable resource to division and section leadership, available both to plan and execute philanthropic activities. “Collaboration can result in broader and more far-reaching impact than any one division or section can accomplish on its own,” notes Stephanie Viola, the Foundation’s director of Corporate and Foundation Relations. “Our divisions are a rich vein of talent and resources that we are eager to harness to ASME’s robust philanthropic efforts.”

Eurydice Kanima

Few people have traveled a greater distance, both literally and figuratively, to build a successful engineering career than Dr. Eurydice “Eury” Kanima. The three-time ASME Foundation Scholarship recipient was born in Rwanda the year before the tragic 1994 genocide devastated her native country. “The genocide molded my path to do better for my family,” Kanima said. “After facing so much tragedy, it’s like we had a mission to accomplish.”

She received the ASME Willis F. Thompson Memorial Scholarship in 2013 as an undergraduate at Midwestern State University in Texas, where she learned both English and the language of engineering. She joined the ASME student chapter in search of a supportive community, gaining what she describes as an opportunity to start forming relationships in an organization “that actually cares about what you’re doing. It made me feel more hopeful.” By her senior year at MSU, Kanima was elected president of the ASME student chapter.

Accepted into the doctoral program at Virginia Polytechnic Institute and State University, Kanima received her second and third ASME Foundation scholarships, which she credits with making her doctoral studies possible. “My research involved modeling bio-inspired structures, like the cuttlebone, the shell of the cuttlefish. With so much compressive strength, it is useful in the design of spacecraft that must withstand high pressures on reentering the atmosphere.”

She was active in the Virginia Tech mentoring program, where she shared her story “so that a young girl starting out in engineering can see what’s possible. It gives me joy to give back.”

Today, Dr. Kanima is an advisory engineer at IBM and, through her support of the ASME Foundation, is still giving back. “To me, the P in Ph.D. stands for problem-solver,” she said.

Since 2003, the Archimedes Club has united the ASME planned giving community in the common goal of supporting programs that will help advance the engineering profession.

MEMBERS

Mahesh C. Aggarwal
Thomas M. Barlow
RuthAnn Bigley
Betty L. Bowersox
Merle & Virgil R. Carter
Eleanor Chew
James W. Coaker
John J. Corcoran
Lynden F. Davis
Daniel Deckler
John N. Eustis
Nancy & Roland Fitzroy
Donald R. Frikken
Marc W. Goldsmith
Richard J. Goldstein
Kalan Guiley
Philip W. Hamilton
Frederick Hanzalek
Francesca & Joe M. Holm
Doris & Warren Hutchings
Jennifer R. Jewers Bowlin
Patricia & Duane P. Jordan
Henry M. Koenig
Milton Leonard
Warren R. Leonard
June Ling
Thomas G. Loughlin
E. Roland Maki
Sonia & Raj Manchanda
Alma U. Martinez Fallion
Loretta C. McHugh
Magda & Michael B. Michaud
John C. Mihm
Michael Molnar
Ozden O. Ochoa
Robert N. Pangborn
Richard Pawliger
Craig D. Redding
Victoria A. Rockwell
K. Keith Roe
Ester & Richard Rosenberg
Ruth & Byron Schieber
Allen Selz
Evelyn & William Shoop
Betsy & Terry Shoup
Kay & Robert T. Simmons
Susan H. Skemp
Pamela & David J. Soukup
John A. Swanson
Chor W. Tan
Ruthie & Keith B. Thayer
Roy P. Trowbridge
William A. Weiblen
James D. Woodburn
Robert Wurtz
Justin Young
Myrna & Sam Y. Zamrik

Holley Society members provide ASME with critical resources to advance the engineering profession and help transform the world through unique engineering-based programs.

MEMBERS

Frank Adamek
Michael Adams
Mostafa Aghazadeh
Ann Baker
Kenneth Balkey
Javid Bayandor
William Borger
Betty Bowersox
Elah Bozorg-Grayel
Stephen Brunkhorst
Charles Bruni
James Buchwald
Jian Cao
Nicholas Cedrone
Demeng Che
Dong-woo Cho
Y. Kevin Chou
Thomas Costabile
Joseph Davidson
Warren DeVries
Philip DiVietro
Kuniaki Dohda
Andrew Drouin
James Drouin
Paul Drouin
R. Drouin
Rene Drouin
Bryan Erler
Xuanlai Fang
Joe Fowler
Patricia Gallagher
Richard Goldstein
D. Y. Kevin Chou
Jeanette Graham
Bobby Grimes

Kalan Guiley
Ping Guo
Krishna Gupta
Edwin Hahibeck
John Hallquist
M. J. Harding
Regina Hoffmann
Kathryn Holmes
Debbie Holton
Min Hong
Pei-Hua Hu
Patricia Hunt
Jennifer Jewers Bowlin
Martin Jun
Serope Kalpakjian
William Kerr
Albert Kilert
Kwang Kim
Kyul Kim
Radoslav Kovacic
Krishna Kumar
Robert J. La Rose
Soohun Lee
Xiaochun Li
Mingxiong Lin
Psang Dain Lin
Kathleen Lobb
Ming-chyuan Lu
Ravi Mahajan
Robert Manross
David McDonnell
Paula McKenzie
Christian Meszaros
C. Dan Mote

George Nash
Thomas Pestorius
Harry Petrequin
Katherine Petrequin
Mary Lynn Reaiff
Ryan Reardon
K. Keith Roe
Steven Rutter
Edward Scherer
Anand Sethupathy
Guangxian Shen
Albert Shih
Cornelius Shih
Terry Shoup
Xuedao Shu
Kendrick Simila
Robert Skaggs
Susan Skemp
Stuart Speyer
John Swanson
Ruthie & Keith Thayer
Samuel Thomas
David Thompson
Shih-Ming Wang
Steve Hseuh Ming Wang
Thomas Washburn
Weichao Wu
Chun Xu
Jiachen Xu
Justin Young
Mohamed Zarrough
Huyue Zhao
Ping Zou
2019 ASME HONORS AND AWARDS

The ASME Honors and Awards program, funded through the ASME Foundation by individual awards and endowment funds, pays tribute to engineering achievement and contributions to the profession.

Reginald I. Vachon (photo right) was selected to receive the ASME Medal, the Society’s highest award. Dr. Vachon was honored for his contributions to the development and commercialization of an innovative strain measurement technology that optically monitors a scalable strain gauge to measure strain, cold working, crack initiation, and structural health. ASME President Richard T. Laudenat presented the award to Dr. Vachon at the 2019 ASME Annual Awards Dinner, which was held in November at the ASME International Mechanical Engineering Congress and Exposition in Salt Lake City, Utah.

HONORARY MEMBERS
Bilal M. Ayub, Ph.D., Fellow
Amit Faghri, Ph.D., Fellow
D. Yog Goswami, Ph.D., Fellow

ASME MEDAL
Reginald I. Vachon, Eur. Ing., Ph.D., Fellow

ADAPTIVE STRUCTURES AND MATERIAL SYSTEMS AWARD
Nancy L. Johnson, Fellow

BERGLES-ROHSENOW YOUNG INVESTIGATOR AWARD IN HEAT TRANSFER
Yongjie Hu, Ph.D., Member

BLACKALL MACHINE TOOL & GAGE AWARD
Burak Sencer, Ph.D., Member
Shingo Tajima

PER BRUEL GOLD MEDAL FOR NOISE CONTROL AND ACOUSTICS
Karl Grosh, Ph.D., Fellow

EDWIN F. CHURCH MEDAL
Andrew A. Polycarpou, Ph.D., Fellow

DANIEL C. DRUCKER MEDAL
John L. Bassani, Ph.D., Fellow

WILLIAM T. ENNor MANUFACTURING TECHNOLOGY AWARD
Steven J. Siketa, Ph.D., Member

FLUIDS ENGINEERING AWARD
Nadine Aubry, Ph.D., Fellow

FREEMAN SCHOLAR AWARD
Upendra S. Rohatgi, Ph.D., Member

Y.C. FUNG EARLY CAREER AWARD
Grace D. O’Connell, Ph.D., Member

HENRY LAURENCE GANTT MEDAL
Margaret G. McCullough, Member

RICHARD J. GOLDSTEIN ENERGY LECTURE AWARD
Steven Chu, Ph.D.

GAS TURBINE AWARD
Christoph Brandstetter, Dr.-Ing.
Maximilian Jiang
Heinz-Peter Schiffer, Dr.-Ing., Member

MELVIN R. GREEN CODES AND STANDARDS MEDAL
Michael Merker, Member

J.P. DEN HARTOG AWARD
Singiresu S. Rao, Ph.D., Fellow

HEAT TRANSFER MEMORIAL AWARDS (SCIENCE)
Satwinder S. Sadhok, Ph.D., Fellow

(RIGHT)
Dereje Agonafer, Ph.D., Fellow

(GENERAL)
James Klausner, Ph.D., Fellow

MAYO D. HERSEY AWARD
Lavern D. Wedeven, Ph.D., Member

HENRY HESS EARLY CAREER PUBLICATION AWARD
Benjamin Webster
Minhao Zhou
Grace D. O’Connell, Ph.D., Member

PATRICK J. HIGGINS MEDAL
Christopher J. Freitas, Ph.D., Fellow

SOICHIRO HONDA MEDAL
Masayoshi Tomizuka, Ph.D., Fellow

INTERNATIONAL COMBUSTION ENGINE AWARD
Peter K. Senecal, Member

WARNER T. KOITER MEDAL
K.T. Ramesh, Ph.D., Fellow

ROBERT E. KOSKI MEDAL
Peter A.J. Achten, Dr.-Ing., Member

ALLAN KRAUS THERMAL MANAGEMENT MEDAL
John R. Thome, Ph.D., Member

FRANK KREITH ENERGY AWARD
Gang Chen, Ph.D., Fellow

BERNARD F. LANGER NUCLEAR CODES AND STANDARDS AWARD
Richard W. Swainey, Member

WILFRED C. LaROCHELE INFORMAL ASSESSMENT AWARD
Edgar A. Whittle, Member

GUSTUS L. LARSON MEMORIAL AWARD
Yang Zhu, Ph.D., Fellow

WANG CHEN MEDAL
Singiresu S. Rao, Ph.D., Fellow

M. EUGENE MERCHANT MANUFACTURING MEDAL OF ASME/SEMA
Sujeet Chand, Ph.D.

MAYO D. HERSEY AWARD
Naomi C. Chester, Ph.D., Fellow

M. EUGENE MERCHANT MANUFACTURING MEDAL OF ASME/SEMA
Sujeet Chand, Ph.D.

VAN C. MOW MEDAL
Tony J. Huang, Ph.D., Fellow

NADAI MEDAL
Elen M. Arruda, Ph.D., Fellow

SIA NEMAT-NASSER EARLY CAREER AWARD
Sina Keten, Ph.D., Member

ROBERT M. NEREM EDUCATION AND MENTORSHIP MEDAL
Kenneth R. Diller, Ph.D., Fellow

BURT L. NEWKIRK MEDAL
Alison C. Dunn, Ph.D., Member

EDWARD F. OBERT AWARD
John H. Lienhard V, Ph.D., Fellow

OLD GUARD EARLY CAREER AWARD
Lee Clemon, Ph.D., Member

RUFUS OLDENBURGER MEDAL
Huei Peng, Ph.D., Fellow

OUTSTANDING STUDENT SECTION ADVISOR AWARD
Mohammad Mahinfalah, Ph.D., Fellow

PERFORMANCE TEST CODES MEDAL
Steven A. Scavuzzo, Member

PI TAU SIGMA GOLD MEDAL
Jesse Capeceletro, Ph.D., Member

CHARLES RUSS RICHARDS MEMORIAL AWARD
Pradeep Sharma, Ph.D., Fellow

Ralph COATS ROE MEDAL
Charles F. Bolden, Jr.

BISHOP P. SUGRUE MEDAL
Martin J. Upiare, Member

R. TOM SAWYER AWARD
Minhao Zhou

S.P. WARD MEDAL
J.N. Reddy, Ph.D., Fellow

R. TOM SAWYER AWARD
Young W. Kwon, Ph.D., Fellow

“TO SET THE CAUSE ABOVE RENOWN, TO LOVE THE GAME BEYOND THE PRIZE”

SIR HENRY JOHN NEWBOLT
FY 2020 YEAR IN REVIEW

WOMEN IN ENGINEERING

At IMECE 2019 in November, ASME hosted a special Women in Engineering Reception to provide women attending the conference with an opportunity to network with their peers. The reception featured a panel of diverse women engineers, including ASME Past President Victoria Rockwell (at the podium) who discussed the best career advice she received when she was a young professional, followed by a lively poster panel discussion with attendees. More than 100 ASME leaders and members attended the event, which demonstrated ASME’s ongoing commitment to promoting and advancing diversity and inclusion within ASME and the engineering profession.

E-FEST SOUTH AMERICA

Approximately 500 students, educators, ASME members, and other attendees participated in the 2019 E-Fest South America event held August 8–10 in Lima, Peru. The three-day event, which highlighted the fun and excitement of the engineering profession, featured a variety of robust competitions and other activities, including a job and education fair, an ASME student member event and a student section workshop, special sessions including a Women in Engineering Panel Session, and several career development events and workshops.

WISC EVENT IN MINNESOTA

ASME Executive Director/CEO Tom Cofaite attended the first-ever Women in Standards & Certification (WiSC) event, during ASME Boiler Code Week in Minneapolis, Minn. The event was established to highlight and celebrate the valued participation and contributions of women on ASME’s various Standards & Certification (S&C) committees and provide women engineers attending Boiler Code Week with the opportunity to meet and network with one another. ASME Past President Maria El-Helmy Kotb (photo center) served as the guest speaker at the event held August 5.

ENGINEERING HISTORY

ASME designated the West Point Foundry in Cold Spring, NY, as a Historic Mechanical Engineering Landmark on October 5. A leading producer of ordnance to serve engineering (S&C) committees and provide women engineers attending Boiler Code Week with the opportunity to meet and network with one another. ASME Past President Maria El-Helmy Kotb (photo center) served as the guest speaker at the event held August 5.

BRAKING INNOVATION

George Westinghouse’s revolutionary development of the automatic air brake transformed braking systems in trains by providing a built-in safeguard that allowed the entire train to come to a halt if air pressure escaped or if train cars became separated. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems. The Westinghouse Automatic Brake’s triple-value system proved to be a significant improvement over previous mechanical or direct-air brake systems.

ECLIPSE INTERNS ZOOM IN

On June 26, members of the ECLIPSE (Early Career Leadership Intern Program to Serve Engineering) class of 2020 presented their final project via Zoom to the ASME draftsmen, and engineers, who played a significant role in building early generations of Minneapolis, Minn. The event was established to highlight and celebrate the valued participation and contributions of women on ASME’s various Standards & Certification (S&C) committees and provide women engineers attending Boiler Code Week with the opportunity to meet and network with one another. ASME Past President Maria El-Helmy Kotb (photo center) served as the guest speaker at the event held August 5.

RICHARD J. GOLDSTEIN ENERGY AWARD

Nobel Prize recipient and former U.S. Secretary of Energy Steven Chu (photo standing) delivered the keynote address at the inaugural Richard J. Goldstein Energy Award Lecture, on November 12. Held during the 2019 IMECE event in Salt Lake City, Utah, Dr. Chu became the first recipient of the new ASME award, which recognizes pioneering contributions to the frontiers of energy engineering science and technology, including energy policy and environmental impact. The award was endowed by ASME Past President Richard Goldstein (photo seated).

IAD MEETS IN WASHINGTON, D.C.

Digital transformation, specifically how digital engineering concepts affect design, implementation, and lifecycle management of mechanical systems, was the focus of the fall 2019 ASME Industry Advisory Board (IAB) meeting. The board considered the topic both in general and in the context of critical industries during the meeting, which was held September 23–24 in Washington, D.C. More than 40 IAB members, ASME staff and guest presenters participated in the meeting, and nine IAB executives participated in 22 Congressional visits with their House and Senate lawmakers or staff.

CELEBRATING ENGINEERING

The 2019 ASME Annual Awards Dinner: Celebrating Engineering Achievement was held November 11 at the Calvin L. Rampton Salt Palace Convention Center in Salt Lake City. The event was hosted by special guest emcee Mo Rocca, CBS News correspondent and the host of the network’s The Henry Ford’s Innovation Nation. The event featured an array of performers who provided entertainment for the dinner attendees. Eight of the engineering profession’s leading innovators were honored for their contributions and achievements.

CHAMPIONS OF STEM

Engineering students from the University of the District of Columbia led ASME’s participation at the second annual Smithsonian/National Museum of African American History and Culture STEM Day, held in Washington, D.C. Representatives of the ASME K-12 STEM Programs staff joined with ASME students to champion Science, Technology, Engineering and Math, and the power of thinking like an engineer at the exhibition, which was held on February 22 in conjunction with Engineers Week.

BRYAN ERLER BECOMES PRESIDENT

During a special Salute to Leadership event held June 16 at ASME’s virtual Annual Meeting, Bryan A. Erler, P.E., was introduced as the 139th president of ASME. Erler has been an active member of ASME since 1991. He has been an executive and expert in the nuclear power industry for over 45 years with significant leadership roles and responsibilities in the design of electric power plants as an owner and senior vice president of Sargent & Lundy. He is currently president of Erler Engineering, Ltd, where he serves as a consultant to the power industry.

INSPIRE ON THE RISE

Since March 2020, as schools began complying with the COVID-19 quarantine protocol, ASME’s INSPIRE program saw participation rise to 8,698 students and 294 new schools using the program. Overall, more than 90,000 students from 1,200 schools across the United States participated in the program. ASME INSPIRE is a scalable STEM education program that delivers a mind-expanding learning experience primarily to middle and high school students who might otherwise never be exposed to the opportunities available in engineering. ASME INSPIRE bias videos, animations, and gaming scenarios to build students’ knowledge of engineering careers and core STEM concepts.

PAST PRESIDENT JOSEPH A. FALCON

Joseph A. Falcon, P.E., the fifth president of ASME, died on July 8, 2019. He was 96 years old. Falcon, an ASME Fellow and Honorary Member, joined the Society as a student member in 1939. He had a distinguished career as an engineer, consultant, and educator, and was a dedicated and enthusiastic supporter of ASME during his more than 60-year career in engineering. Among his many leadership positions at ASME, he served on several committees and boards, including the Board of Governors, and later became president of ASME from 1992–1993.
The American Society Of Mechanical Engineers  
CONSOLIDATED STATEMENT OF FINANCIAL POSITION  
June 30, 2020

<table>
<thead>
<tr>
<th>Assets</th>
<th>General</th>
<th>Designated and restricted</th>
<th>Consolidating adjustments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$ 7,310,937</td>
<td>5,250,269</td>
<td>—</td>
<td>12,561,206</td>
</tr>
<tr>
<td>Accounts receivable, less allowance for doubtful accounts of $420,000 in 2020</td>
<td>22,704,987</td>
<td>1,003,443</td>
<td>(10,332,226)</td>
<td>13,376,204</td>
</tr>
<tr>
<td>Due from The ASME Foundation, Inc.</td>
<td>—</td>
<td>103,256</td>
<td>(103,256)</td>
<td>—</td>
</tr>
<tr>
<td>Inventories</td>
<td>151,585</td>
<td>222,675</td>
<td>—</td>
<td>374,260</td>
</tr>
<tr>
<td>Prepaid expenses, deferred charges, and deposits</td>
<td>4,143,033</td>
<td>40,158</td>
<td>—</td>
<td>4,183,191</td>
</tr>
<tr>
<td>Investments</td>
<td>78,425,210</td>
<td>48,785,075</td>
<td>—</td>
<td>127,210,285</td>
</tr>
<tr>
<td>Property, furniture, equipment, and leasehold improvements, net</td>
<td>20,465,793</td>
<td>12,971</td>
<td>—</td>
<td>20,478,764</td>
</tr>
<tr>
<td><strong>Total assets</strong></td>
<td><strong>$ 133,201,545</strong></td>
<td><strong>55,417,847</strong></td>
<td><strong>(10,435,482)</strong></td>
<td><strong>178,183,910</strong></td>
</tr>
</tbody>
</table>

Liabilities and Net Assets

<table>
<thead>
<tr>
<th>Liabilities</th>
<th>General</th>
<th>Designated and restricted</th>
<th>Consolidating adjustments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounts payable and accrued expenses</td>
<td>$ 6,310,689</td>
<td>12,077,483</td>
<td>(10,232,226)</td>
<td>8,155,946</td>
</tr>
<tr>
<td>Due to The ASME Foundation, Inc.</td>
<td>103,256</td>
<td>—</td>
<td>(103,256)</td>
<td>—</td>
</tr>
<tr>
<td>Accrued employee benefits</td>
<td>10,463,080</td>
<td>—</td>
<td>—</td>
<td>10,463,080</td>
</tr>
<tr>
<td>Deferred publications revenue</td>
<td>6,677,762</td>
<td>—</td>
<td>—</td>
<td>6,677,762</td>
</tr>
<tr>
<td>Deferred dues revenue</td>
<td>2,263,217</td>
<td>—</td>
<td>—</td>
<td>2,263,217</td>
</tr>
<tr>
<td>Accreditation and other deferred revenue</td>
<td>19,286,829</td>
<td>92,492</td>
<td>—</td>
<td>19,379,321</td>
</tr>
<tr>
<td>Deferred rent</td>
<td>8,665,985</td>
<td>—</td>
<td>—</td>
<td>8,665,985</td>
</tr>
<tr>
<td>Payroll Protection Program loan</td>
<td>9,324,283</td>
<td>—</td>
<td>—</td>
<td>9,324,283</td>
</tr>
<tr>
<td><strong>Total liabilities</strong></td>
<td><strong>63,095,101</strong></td>
<td><strong>12,169,975</strong></td>
<td><strong>(10,335,482)</strong></td>
<td><strong>64,929,594</strong></td>
</tr>
</tbody>
</table>

Net assets:

| Without donor restrictions                       | 70,106,444 | 26,703,382                 | (100,000)                 | 96,709,826  |
| With donor restrictions                          | —          | 16,544,490                 | —                         | 16,544,490  |
| **Total net assets**                             | **70,106,444** | **43,247,872**             | **(100,000)**             | **113,254,316** |

**Total liabilities and net assets**

| **$ 133,201,545** | **55,417,847** | **(10,435,482)** | **178,183,910** |
## ASME OFFICES

### ASME - MAIN OFFICE
Two Park Avenue  
6th Floor  
New York, NY 10016-5990 U.S.A.  
Main: 212-591-7000  
Fax: 212-591-7674  
E-mail: info@asme.org  
www.asme.org

### ASME - HOUSTON OFFICE
11757 Katy Freeway  
Suite #100  
Houston, TX 77079-1733 U.S.A.  
Main: 281-983-3491 or 1-866-276-3738  
E-mail: info@asme.org  
www.asme.org

### ASME - NEW JERSEY OFFICE
150 Clove Road  
6th Floor  
Little Falls, NJ 07424-2139 U.S.A.  
Main: 973-244-2300  
Fax: 973-882-5155  
E-mail: info@asme.org  
www.asme.org

### ASME - CUSTOMER CARE
1-800-843-2763 (U.S., Canada, and Mexico)  
+646-616-3100 (Global Direct)  
Main Fax: 973-882-5155  
Membership Fax: 973-882-1717  
E-mail: CustomerCare@asme.org  
www.asme.org

### ASME - WASHINGTON, D.C. OFFICE
1128 L Street, NW  
Suite 500  
Washington, D.C. 20036-5104 U.S.A.  
Main: 212-591-7000  
Fax: 202-423-9471  
E-mail: info@asme.org  
www.asme.org

### ASME - FOUNDATION
Two Park Avenue  
7th Floor  
New York, NY 10016-5990 U.S.A.  
Main: 212-591-8040  
Fax: 212-591-7674  
E-mail: info@asmefoundation.org  
www.asmefoundation.org

### ASME OFFICES (Table)

<table>
<thead>
<tr>
<th>General</th>
<th>Designated and restricted</th>
<th>Consolating adjustments</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating revenue:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Membership dues, publications, accreditation, conference fees, and other revenue by sector / operating unit:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Codes and standards</td>
<td>$56,213,200</td>
<td>54,974</td>
<td>$55,268,174</td>
</tr>
<tr>
<td>Conformity assessment</td>
<td>24,146,730</td>
<td>348</td>
<td>24,147,078</td>
</tr>
<tr>
<td>Learning and development</td>
<td>4,199,278</td>
<td>—</td>
<td>4,199,278</td>
</tr>
<tr>
<td>Programs</td>
<td>9,746,553</td>
<td>2,205,354</td>
<td>(1,745,194)</td>
</tr>
<tr>
<td>Technical events and content</td>
<td>5,740,341</td>
<td>1,117,245</td>
<td>(827)</td>
</tr>
<tr>
<td>Publications</td>
<td>14,195,641</td>
<td>—</td>
<td>14,195,641</td>
</tr>
<tr>
<td>Constituent engagement</td>
<td>11,195,378</td>
<td>—</td>
<td>11,195,378</td>
</tr>
<tr>
<td>Miscellaneous revenue</td>
<td>345,537</td>
<td>773,950</td>
<td>(773,950)</td>
</tr>
<tr>
<td><strong>Total operating revenue</strong></td>
<td>$116,858,918</td>
<td>4,151,871</td>
<td>(2,519,971)</td>
</tr>
<tr>
<td>Operating expenses:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Program services by sector / operating unit:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Codes and standards</td>
<td>18,028,055</td>
<td>490,813</td>
<td>(43,243)</td>
</tr>
<tr>
<td>Conformity assessment</td>
<td>15,194,184</td>
<td>10,309</td>
<td>—</td>
</tr>
<tr>
<td>Learning and development</td>
<td>7,372,495</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Programs</td>
<td>5,782,665</td>
<td>2,323,419</td>
<td>(1,514,043)</td>
</tr>
<tr>
<td>Technical events and content</td>
<td>12,076,461</td>
<td>2,206,896</td>
<td>(38,519)</td>
</tr>
<tr>
<td>Publications</td>
<td>11,453,908</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Technology advancement and business development and industry events</td>
<td>4,082,811</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Global public affairs</td>
<td>5,289,389</td>
<td>665,376</td>
<td>(736,257)</td>
</tr>
<tr>
<td>Constituent engagement</td>
<td>5,809,353</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Total program services</strong></td>
<td>$85,088,721</td>
<td>5,726,813</td>
<td>(2,332,062)</td>
</tr>
<tr>
<td>Supporting services:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board of governors and committees</td>
<td>1,253,124</td>
<td>48,890</td>
<td>—</td>
</tr>
<tr>
<td>Marketing</td>
<td>8,206,745</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Sales and customer care</td>
<td>2,442,322</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>General administration</td>
<td>28,920,133</td>
<td>316,524</td>
<td>(887,909)</td>
</tr>
<tr>
<td><strong>Total supporting services</strong></td>
<td>$40,022,304</td>
<td>365,414</td>
<td>(887,909)</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>$125,111,025</td>
<td>6,092,227</td>
<td>(2,519,971)</td>
</tr>
<tr>
<td>Deficit of operating revenue over expenses</td>
<td>$(9,252,107)</td>
<td>(1,940,356)</td>
<td>—</td>
</tr>
<tr>
<td>Nonoperating activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment returns, net</td>
<td>1,642,569</td>
<td>360,626</td>
<td>—</td>
</tr>
<tr>
<td>Pension and post-retirement changes other than net periodic costs</td>
<td>(7,428,913)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other components of net periodic costs</td>
<td>(80,464)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Decrease in net assets</td>
<td>(15,118,915)</td>
<td>(1,579,730)</td>
<td>—</td>
</tr>
<tr>
<td>Net assets at beginning of year, as restated</td>
<td>85,225,359</td>
<td>44,827,602</td>
<td>(100,000)</td>
</tr>
<tr>
<td>Net assets at end of year</td>
<td>$70,106,444</td>
<td>43,247,872</td>
<td>(100,000)</td>
</tr>
</tbody>
</table>