



1880 Year ASME was Established 90,000+ ASME Members, including Students and **Early Career Engineers** 23,000+ **ASME Student Members** 15,000+ ASME Early Career Engineer Members, including Graduate Students 135+ **Countries with ASME Members** 3,700+ **Active Volunteer Leaders** 560+ **ASME Standards** 100+ Countries using the **ASME Boiler & Pressure** Vessel Code **Table of Contents ASME Annual Report** pg. 4 **ASME Foundation** pg. 12 **Financials** pg. 26

ASME Mission

To advance engineering for the benefit of humanity

ASME Vision

To be the premier resource for the engineering community globally

ASME 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



THOMAS COSTABILE, P.E. EXECUTIVE DIRECTOR AND CEO



BRYAN A. ERLER, P.E. PRESIDENT (2020-2021)

Letter from the

President and Executive Director/CEO

Despite the ever-changing landscape brought about by the COVID-19 pandemic, fiscal year 2021 was a year of significant achievements for ASME. The perseverance and dedication of ASME volunteers, partners, and staff enabled us to keep engineering at the forefront of innovation while staying focused on our mission to advance engineering for the benefit of humanity.

We are grateful for the steady guidance provided by the ASME Board of Governors and the leadership of the Society, as they made decisions to keep our staff, members, and the engineering community at-large healthy and safe. ASME staff successfully operated in a work-from-home protocol, and all ASME meetings and events were conducted virtually. In doing so, we kept the health and well-being of everyone our priority.

These decisions notwithstanding, ASME operations and programs continued to thrive and emerged stronger than ever.

ASME formed the International Society of Interdisciplinary Engineers, LLC (ISIE), a new for-profit subsidiary to house business ventures that will bring new and innovative products, services, and technologies to the engineering community. In November 2020, TechStreet joined ISIE as the first business venture acquired under this new structure. The combined expertise of ASME and TechStreet—along with their proprietary technologies and operational knowledge—will create unique value for the global standards community.

We are very pleased to report that, even in a year marred by economic downturns, the ASME Foundation made significant headway in its donor base and fundraising goals for ASME's Campaign for Next Generation Engineers. With an ambitious five-year goal to raise \$50 million in support of Education that Inspires, Careers that Matter, and Ideas that Innovate, we are grateful for the nearly 6,000 individuals, corporations, and foundations who generously supported ASME's philanthropic programs. To learn more about the ASME Foundation or to donate to ASME's Campaign for Next Generation Engineers, please visit www.asmefoundation.org,

Perhaps one of the more significant undertakings in FY21 was ASME's deep commitment to diversity, equity, and inclusion (DEI) as we continue to celebrate the range of voices, perspectives, backgrounds, and experiences in our Society and the engineering community. It is our conscious intention to promote DEI in our programs, events, and communications, and to create safe spaces for groups and individuals to share concerns and discuss solutions. In pursuing this ongoing work, ASME adheres to three guiding principles: we are a global, diverse, and inclusive Society; we are a Society that adheres to the highest ethical standards; and we are a Society focused on the next generation.

To this end, we are proud to have launched our new DEI Toolkit, a helpful resource for advancing and promoting DEI initiatives throughout the Society. This year we also introduced our DEI Podcast to engage in meaningful conversations with people of diverse backgrounds and experiences from all over the world. Special events like our first Increasing Women in Mechanical Engineering Conference, held in January, gave us an opportunity to discuss engineering education practices and culture as key components in increasing the number of women in the mechanical engineering profession. We also recently held our Women in Standards & Certification event to celebrate the valued participation and contributions of women who serve on ASME's various Standards & Certification committees while providing visibility, networking, and knowledge transfer opportunities for women in attendance.

On behalf of the Board of Governors and the leadership team, we thank you for your ongoing dedication and support of ASME and its mission. It is most gratifying to know that engineers continue to have a significant positive impact on our lives, our communities, and our world—even during the most challenging of times.

Our best wishes for a safe and healthy year,

Thomas Costabile, P.E. Executive Director and CEO

Tanım Costal

Bryan A. Erler, P.E. President (2020-2021)

Bugar a. Erler

FY 2021

Board of Governors



Bryan A. Erler, P.E. ASME President (2020–2021) President of Erler Engineering Ltd.



Mahantesh Hiremath, Ph.D., P.E. ASME President-Elect (2021–2022) Vice President, Mechanical and Aerospace Engineering SC Solutions



Richard T. Laudenat, P.E.
ASME Immediate Past President
(2019–2020)
Former Plant Manager
GDF Suez, now ENGIE (Retired)



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



Todd R. Allen
President and Founder
Allen Research
Tech-Services, Inc.



Andrew S. Bicos, Ph.D.
Former Director of Systems
Engineering & Analysis Technology
The Boeing Company (Retired)



Joe R. Fowler, Ph.D., P.E. Former President and Co-Founder Stress Engineering Services, Inc. (Retired)



Laura E. Hitchcock
Consultant
Former Senior Standards Specialist
and Corporate Project Manager
The Boeing Company
(Retired)



Thomas R. Kurfess, Ph.D., P.E. Chief Manufacturing Officer Oak Ridge National Laboratory



Richard C. Marboe, Ph.D.
Former Director, Engineering
Services at Applied Research Laboratory
Penn State University (Retired)



Michael F. Molnar, P.E.
Founding Director,
Office of Advanced Manufacturing
National Institute of
Standards and Technology



Karen J. Ohland
Associate Director for
Finance and Operations
Princeton University Art Museum
Princeton University (Retired)



Paul D. Stevenson
Executive Vice President/Partner
McCormick Stevenson Corporation

Society Officers



Thomas Costabile, P.E.

Executive Director/CEO

ASME



William Garofalo Chief Financial Officer ASME



Robert N. Pangborn, Ph.D.
ASME Secretary/Treasurer
Former Vice President and
Dean for Undergraduate Education
Penn State University (Retired)



John Delli Venneri Assistant Secretary/ General Counsel ASME



Senior Vice Presidents



Kalan R. Guiley
ASME Public Affairs
& Outreach
Senior Manager,
Global System Safety
The Boeing Company



George Papadopoulos, Ph.D.
ASME Technical Events & Content
Principal/Director of Sensor Systems
Innoveering, LLC



Thomas P. Pastor, P.E.
ASME Standards
& Certification
Vice President
Hartford Steam Boiler



Michael S. Roy, P.E.
ASME Member
Development
& Engagement
Vice President,
Engineering
Hartford Steam Boiler



Callie L. Tourigny
ASME Student &
Early Career
Development
Development Director
LifeAMP, LLC

ASME STRATEGY

MISSION

Advance engineering for the benefit of humanity

VISIO

INTERNE

The premier refer the for the engire community of the following section is the following section of the following section of the following section is the following section of the following section

WE WILL SERVE THOSE ASPIRATIONS THROUGH

ADVANCED MANUFACTURING

Additive Manufacturing Industry 4.0

DESIGN

ENGINEERING

BIOENGINEERING

Cellular Manufacturing
Biologics
Tissue Engineering

PRESSURE TECHNOLOGY

Design | Materials
Fab Inspection
Operation Commissioning
Maintenance

CYBERSECURITY

SUSTAINABILITY

BIG DAT



esource neering globally

Sustainable Solutions **Clean Energy Efficient Housing** Clean Water

Efficient Transportation Public Safety Public Healthcare

THESE STRATEGIC TECHNOLOGIES GLOBALLY:

T OF THINGS

NANO TECHNOLOGY

MATERIALS

INTELLIGENCE

ARTIFICIAL

CLEAN ENERGY

Solar | Wind | Biomass Storage | Nuclear

ROBOTICS

Industrial Automation | UAVs Field | Mobile | Autonomous

A ANALYTICS

YEAR IN REVIEW

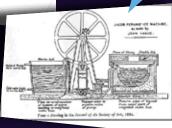
In November 2020, Clarivate Plc (NYSE: CCC), a global leader in providing trusted information and insights to accelerate the pace of innovation, and ASME announced that the International Society of Interdisciplinary Engineers (ISIE) LLC, a for-profit subsidiary of ASME, has acquired Techstreet, a new ASME commercial arm for innovative products & services. The combined expertise of these two organizations along with their proprietary technologies and operational knowledge - creates unique value for the global standards community.

ASME held its first Increasing Women in Mechanical Engineering Conference to examine, challenge, and discuss engineering education practices and culture as key elements to increasing the number of women in mechanical engineering. The iWME conference explored topics on how engineering has changed for women, diversity in engineering in the next decade, and ways to increase diversity and competitiveness in the engineering workforce. Dr. Aprille Ericsson, aerospace engineer at NASA's Goddard Space Center, delivered the keynote to address the challenges and opportunities for woman in mechanical engineering.









In February 2020, ASME Executive Director/CEO Tom Costabile; Chief Strategy Officer Michael Johnson; and Director of ASME India Madhukar Sharma visited the Petroleum and Natural Gas Regulatory Board (PNGRB) headquarters in New Delhi, India. They met with the PNGRB chairman, D.K. Sarraf, to discuss ASME's presence in India and opportunities to bolster the expanding partnership between the two organizations. In a step that enhances a meaningful partnership and further collaboration, ASME signed a memorandum of understanding (MoU) with the PNGRB of India on August 17, 2020.

ASME Government Relations convened a new public policy program, ASME Policy Impact, from May 24 to 26, 2021. Available for free to all ASME members, the virtual event included keynotes, briefings, and discussion panels on the science and engineering issues of the day, and an exciting new opportunity for ASME members to meet virtually with their U.S. congressional delegation members in Congress. Highlights of the event included bipartisan perspectives from Representatives Chrissy Houlahan (D-PA) and Brian Fitzpatrick (R-PA), and a keynote address from Secretary of Energy Jennifer Granholm, who emphasized the critical role of the engineering community in researching, designing, and deploying innovative technologies to lead a global clean energy technology transition.

ASME recognized the Perkins Vapor-Compression Cycle for Refrigeration as its 274th Historic Mechanical Engineering Landmark. Generally regarded as one of the most significant engineering achievements, the Vapor-Compression cycle achieved wide use in the preservation of food and in cooling and heating of living spaces, among other important applications. Created by American inventor Oliver Evans in 1805, the closed, vapor-compression cycle for cooling described, but never constructed a working device. Thirty years later, Jacob Perkins, an associate of Evans, filed a patent in England for a continuous vapor-compression machine that could cool water and solidify it into ice continuously. This closed-cycle device became the first working mechanism to use a system of vapor-compression

for refrigeration.

ASME HONORS THEIR MEMORY AND LEGACY



THOMAS M. BARLOW

Thomas M. Barlow, ASME Past President (2008–2009), former member of the Board of Governors, and a member of the ASME Auxiliary, died on October 4, 2020 in his hometown of Lincoln, California. He was 85 years old. An ASME Fellow, Barlow was a strong supporter and leader in student outreach, membership development, technology, and engineering diversity. He served as a judge in student paper competitions and played a key role in developing ASME's Human Powered Vehicle Challenge for university students, now a featured event at ASME's Engineering Festival (E-Fest). Barlow was also a recipient of the ASME Dedicated Service Award.

Even amidst COVID, the ASME Foundation continued to bring volunteer engineers to K-12 classrooms. The "DropMEIn!" program enabled students to meet up with professional engineers virtually to explore the limitless possibilities of an engineering career. Dr. Jim Kaculi, vice president of engineering for Dril-Quip, Inc., a supporter of the program said, "Having our engineers so engaged with students in an interactive classroom setting, and supporting STEM efforts, will help the development of young, innovative, and inspiring minds. Our goal is to ensure support for the next generation of engineers needed to empower our world."

Mindful of the Society's responsibility to support the needs of all its constituents. ASME launched the Diversity, Equity, and Inclusion Toolkit, a collection of resources to enhance DEI and to encourage, support, and celebrate the diverse voices of our employees, volunteers, customers, and communities. ASME seeks to ensure that all members feel welcomed and included in the ASME community, and aims to provide a culture of respect and courtesy for everyone.

Mahantesh Hiremath, Ph.D., P.E., a native of Pune, India, was announced as the 140th president of ASME at the Society's annual meeting held virtually on June 21, 2021. Dr. Hiremath, an ASME Fellow, has been an active member of ASME since 1997. He has served as a member of the ASME Board of Governors from 2015 to 2019. With a distinguished career spanning more than 30 years, he is one of only a few engineers in the world to have designed and engineered systems in four different environments deep underground, off-shore, on-ground, and in space. He currently serves as vice president at SC Solutions in Sunnyvale, Calif. Dr. Hiremath becomes the first person of Indian and Asian descent to become president of ASME. He will serve the 2021 to 2022 presidential term.





ASME held its first fully-virtual Honors and Awards Event in conjunction with the 2020 ASME International Congress and Exposition in November 2020. This Telly Award-winning program showcased the achievements of nine outstanding engineers and their incredible contributions to the engineering profession. Honorees included ASME Medalist Dr. Subra Suresh and Dr. James J. Truchard recipient of the Richard J. Goldstein Energy Lecture Award . The event was hosted by seven-time Emmy Award winning sports commentator and journalist, Roy Firestone (photo).

ASME welcomed 50 new Fellows to the Engineering for Change (E4C) 2021 Fellowship. With support from the ASME Foundation and generous donors, including the Autodesk Foundation, this year's cohort doubled from 25 to 50, with members hailing from 24 countries – ranging from the U.S. and Canada to Egypt, Rwanda, Germany, and Bangladesh. These E4C Fellows develop leadership skills to reach their fullest potential and deliver solutions that achieve the United Nations Sustainable Development Goals. E4C Fellows deepen their understanding of engineering for global development through targeted research, analysis, and engagement with the E4C community of experts.



CHARLES O. VELZY

Charles O. Velzy, who served as the 108th president of ASME (1989–1990), died on December 11, 2020 at the age of 90. He began his illustrious career in 1957 at the engineering services company Nussbaumer, Clarke & Velzy as Senior Design Engineer. Later, he became a private consultant and president of Charles O. Velzy, P.E. in the field of waste treatment and disposal. In 2007, Velzy received the Distinguished Service Award from the ASME Materials & Energy Recovery Division. He served in leadership for the Society's Solid Waste Processing Division and Research Committee on Industrial and Municipal Waste. In 1976, he was elected a Fellow of ASME and, in 2005, was chosen as an Honorary Member of the Society.



REGINALD I. VACHON

Reginald I. Vachon, ASME Past President (2003–2004), former member of the Board of Governors, and an Honorary Member of the Society, died on December 24, 2020 in Atlanta, Georgia. He was 83 years old. Dr. Vachon, an ASME Fellow, was an active, dedicated, and beloved member of the Society for more than half a century, having served in leadership roles on numerous councils and committees. He was a recipient of the ASME Dedicated Service Award, and in 2019 was bestowed the ASME Medal, the Society's highest award for eminently distinguished engineering achievement. His career as an engineer, executive, and lawyer spanning more than six decades exemplified his passion and enthusiasm for the engineering profession and for his friends and colleagues at ASME.





The ASME Foundation garners support for an array of philanthropic initiatives with one overarching goal: empowering next generation engineers.

These programs seek to advance the values of Equity in Engineering—increasing access to technical careers for those who are underrepresented in the profession—and Equity in Engineering Solutions, making the innovations that improve quality of life available to all, especially those in underserved global communities.

This is the work of the ASME Foundation. What makes it possible are ASME's unparalleled engineering expertise, vast global network, impactful philanthropic programs...and YOU.

Board of Directors



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



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



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



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



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



Thomas J. Meehan ASME Foundation Treasurer

Campaign for Next Generation Engineers Cabinet

Keith Roe, P.E.

Chair, ASME Philanthropy Committee & Campaign Cabinet Chairman & CEO, Burns & Roe Enterprises (retired)

Kenneth R. Balkey, P.E.

Member, ASME Philanthropy Committee Senior Executive, Westinghouse (retired)

Michelle Blaise

SVP, ComEd, an Exelon Company

Gwendolyn Boyd, Ph.D.

Former President, Alabama State University Johns Hopkins University, Applied Physics Lab (retired)

Carol Dahl, Ph.D.

Executive Director, The Lemelson Foundation

Bob Hauck, P.E.

Healthcare Chief Mechanical Engineer, GE (retired)

William Magwood, IV

Former Commissioner, United States Nuclear **Regulatory Commission**

Chandrakant Patel, P.E.

Chief Engineer and Senior Fellow, HP

Thomas D. Pestorius

President & CEO, H&P Inc. (retired) Member, ASME Philanthropy Committee

Gwynne Shotwell

President, SpaceX

Terry E. Shoup, Ph.D., P.E.

Professor Emeritus of Mechanical Engineering, Santa Clara University Member, ASME Philanthropy Committee

Jean Zu, Ph.D.

Dean of the Schaefer School of Engineering and Stevens Institute of Technology

ASME Foundation Staff

Stephanie Viola

Director, Corporate and Foundation Relations

Keith Miles

Director, Major Gifts

Allysa Oliver

Corporate and Foundation Relations Specialist

Jarrett Reich

Communications Specialist

John Dys

Accounting Manager

Prathamesh Jadhav

Clerical Assistant

Philanthropy Committee



Keith Roe, P.E. Chair Burns & Roe Enterprises (retired)



Terry E. Shoup, Ph.D., P.E. Vice Chair Santa Clara University



Jennifer R. Jewers Bowlin, P.E.

Henderson Engineers



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



Mahantesh S. Hiremath, Ph.D., P.E. SC Solutions



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



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



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



Lester Su, Ph.D. Consulting Associate Professor of Mechanical Engineering, Stanford University



Justin R. Young Denmar Technical Services, Inc.



Gretchen Crutchfield Development Specialist ASME Philanthropy



Anand Sethupathy Managing Director, ASME Programs



FY2021 HIGHLIGHTS

In a year marked by a global pandemic, economic disruption, and growing awareness of social inequities, ASME's Campaign for Next Generation Engineers expanded its donor base and made significant progress toward its fundraising goals.

Thanks to the support of nearly 6,000 individuals, corporations, and foundations who stepped up to support ASME's philanthropic programs during fiscal year 2021, the Foundation is pleased to report these highlights:

Education that Inspires

- Created an alliance with Discovery Education (DE) to deliver engineering-related STEM curriculum to up to 750,000 K-12 students annually.
- Joined Boeing, Microsoft, Chevron, and P&G as the engineering content anchor in the STEM Careers Coalition™.
- Nearly doubled the number of K-12 students introduced to the E in STEM—from 91,000 students in FY20 to 165,000+ in FY21.
- Launched DropMEIn!, where ASME volunteer engineers shared the wonders of engineering with approximately 500 K-12 STEM students in FY21.
- Increased the value of ASME Foundation Scholarships by 19% over the prior year and increased our Diversity Ratio to 50%.
- Pivoted to 100% digital E-Fest experiences, reaching over 3,000 students from 40+ countries, and added a pilot high school track to E-Fest Digital 2021.

Careers that Matter

- Thanks to a generous donation from the Autodesk Foundation, we doubled the number of Engineering for Change (E4C) Fellowships from 25 to 50.
- Initiated development of the Career Engagement Center, providing a digital platform for aspiring and early-career engineers to recognize and realize their full potential.
- Conceived the Community College Engineering Pathways initiative: ASME's multichannel program to create new two-year and non-traditional pathways leading to skilled technical roles.

Ideas that Innovate

- With support from Siemens USA, launched the INNOVATE FOR IMPACT: Siemens Design Challenge to cultivate solutions to two of the UN Sustainable Development Goals.
- With support from The Lemelson Foundation, pivoted the ASME ISHOW to 100% digital and selected the 2021 cohort of nine social ventures solving critical quality-of-life challenges from over 300+ entrants across the three regional ISHOWs.

Diversity, Equity, and Inclusion

- Held our first Increasing Women in Mechanical Engineering conference, attracting nearly 500 participants.
- Awarded 152* scholarships, thanks to the generosity
 of many donors, including new corporate support from
 Ansys, Inc. Nearly half went to women and those who are
 underrepresented in the engineering profession (*includes
 ASME Foundation, Auxiliary, and Division awards).
- Awarded half of all E4C Research Fellowships to women.
- Presented the first annual Lakshmi Singh Early Career Leadership Award recognizing an early-career woman engineer who has demonstrated leadership in, commitment to, and continued service with ASME.





In addition to sustaining existing programs, the ASME Foundation laid the groundwork for four new initiatives that will launch in fiscal year 2022.

Community College Engineering Pathways

In alignment with its goal of empowering and growing a more diverse, equitable, and inclusive technical workforce, ASME launched Community College Engineering Pathways (CCEP), a pilot program with at least six community colleges and three Historically Black Colleges and Universities (HBCU). Research indicates that 3.4 million technical positions will be open in STEM-related fields in the U.S. in the next couple years, and ASME's CCEP initiative is designed to create alternative pathways to rewarding technical careers for those with relevant two-year degrees, as well as other certifications.

Career Engagement Center (CEC)

A digital platform where engineering students and early-career engineers and other technical professionals can connect to training opportunities, mentors, internships, employment, and each other. The CEC will enable users to model and simulate alternative career paths and understand the certifications and experience needed to pursue them.

ISHOW Idea Lab

With ASME's successful ISHOW hardware accelerator as the model, the Idea Lab will support social impact entrepreneurs earlier in the product development cycle, providing engineering expertise, business guidance, and seed capital to advance innovations from concept to prototype. Structured as a competition, winning prototypes will be invited to enter ISHOW for help with scaling to market-ready products.

Engineering Dreams/DropMEIn!

In collaboration with Discovery Education, ASME is the engineering content anchor for online curriculum resources aimed at K-12 students. Discovery's ED platform reaches more than 750,000 students, most in Title I schools, with engaging content that emphasizes the E in STEM. DropMEIn! invites ASME members to visit K-12 classrooms, both virtually and in person, to share their experiences as professional engineers and ignite a passion for problem-solving.



IMPACT STORIES



Journey Washingtonhigh

Journey Washingtonhigh

For Ansys Inc. Scholarship recipient Journey Washingtonhigh, having the ability to create something has always been front and center. From a childhood interest in the arts and music, Journey has always had a passion to create. So it's no surprise that she took an immediate liking to engineering. As she explains, "I've been able to participate in research and group projects that have further evolved my interest in engineering and product design."

As a student at Stanford University, Journey is staying true to form, pursing a well-rounded education with ASME's help. "This scholarship is helping me pursue mechanical engineering by helping me participate in research opportunities, different extracurricular activities, and organizations that include my interests in engineering," Journey said.

For Journey, a career in engineering offers the opportunity to continue to be a creator. "This scholarship enables me to pursue what I've been enjoying my whole life, being able to create something in my mind and display that to other people." As she continues her education, the ASME Foundation is proud to help provide her with the means to pursue her ambitions.





Isha Tyle

Isha Tyle

Isha Tyle can tell you when the seed was planted for her engineering career: it all started with a fruit battery. Taking part in project-based engineering programs starting in middle school, Isha was able to work with, and learn from, engineering mentors to complete, as she puts it, "all these cool, really hands on projects which I wasn't able to experience in school." Her passion continued through high school and into college, as she began her pursuit of a mechanical engineering degree at the University of Illinois.

With support from ASME, and as the recipient of the 2021–2022 Kenneth Andrew Roe Scholarship, Isha was able to work toward her goal of pursuing an engineering education more easily, especially as financial hardships threatened to stand in her way. "It has allowed me to become more financially independent in regard to my college tuition and really support myself through difficult times when my father lost his job just as I was beginning college," she recalls.

As Isha looks to her future, she is reminded of what awakened her interest in mechanical engineering—her own irrepressible curiosity and the example set by those who preceded her. She hopes to serve as a similar example for future engineers by working with young girls, showing them what is possible, and demonstrating by her accomplishments a path for success.

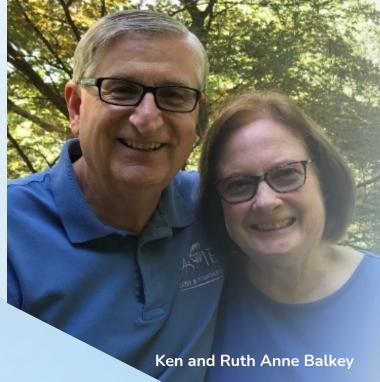


VOLUNTEER/ DONOR SPOTLIGHT

Volunteer Spotlight: Ken Balkey

It's not easy to fit Ken Balkey in a box. To spotlight his work as an ASME volunteer risks ignoring the generosity he and his wife, Ruth Anne, demonstrated when they endowed an ASME Foundation Scholarship. To talk about his work as a consulting engineer at Westinghouse Electric Company omits mention of his role on the adjunct faculty of the University of Pittsburgh's prestigious Swanson School of Engineering.

But the focus of this article is volunteering, and in that regard ASME Life Fellow Kenneth R. Balkey, P.E. truly sets the standard—and then some. Perhaps most notable among Ken's volunteer experience is his service as past senior vice president, ASME Standards & Certification. He spent many years doing research to support the Boiler and Pressure Vessel Code for nuclear power plant applications and served on and chaired the ASME Council on Standards and Certification. Editorial space does not allow a full listing of Ken's contributions of time and talent to ASME.



"... I started calling some close ASME colleagues and friends to see if they would like to join Ruth Anne and me in endowing an ASME scholarship." Ken Balkey

As a member of the ASME Philanthropy Committee, Ken has demonstrated a prodigious aptitude for fundraising, particularly in support of scholarships. "Over the past months, I started calling some close ASME colleagues and friends to see if they would like to join Ruth Anne and me in endowing an ASME scholarship," Ken notes. "As a result of this quiet outreach, Gerry Eisenberg, a 49-year veteran of the ASME staff and leader in the ASME Standards and Engineering Sector, and Dr. Sid Bernsen, a longtime colleague of the late Mary Drouin in the field of risk assessment standards, both have agreed to endow ASME scholarships."

It's a little-known fact that this former track star, who as a high school senior finished more than respectably in the 1968 Boston Marathon, has logged over 78,000 miles in running shoes, a record outdone only by the figurative miles he's logged as an ASME volunteer. And judging by his current pace of service to this community, he's nowhere near the finish line.

Donors/Partners/Collaborators



































An Exelon Company

Corporate Donor Spotlight: ComEd

ComEd, a unit of Chicago-based Exelon Corporation, provides electricity to more than 4 million customers across northern Illinois. The company is also a valued supporter of ASME, both as a member of the ASME Industry Advisory Board and as a donor to the ASME Foundation.

"By developing and supporting STEM-focused programming for students, we're making them aware of the fastest-growing career field as they consider their next steps after high school." Michelle Blaise

Michelle Blaise, ComEd's senior vice president of technical services, is also a member of the ASME Foundation's "campaign cabinet," the advisory group that provides strategic leadership for ASME's five-year, \$50 million fundraising effort, the Campaign for Next Generation Engineers. As part of ComEd's collaboration with ASME, company engineers participate in our DropMEIn! program, visiting local K-12 classrooms, either virtually or in person, to share their experience and inspire next generation engineers.

"As a major Illinois company and employer, ComEd recognizes its responsibility to be a good community partner and help create a workforce that reflects the communities we serve," Blaise said. "By developing and supporting STEM-focused programming for students, we're making them aware of the fastest-growing career field as they consider their next steps after high school. Programs like ASME's DropMEIn! ensure we cultivate the talents of the next generation of engineers and, more importantly, capture their new perspectives."

ComEd's extensive charitable investments focus on the environment, arts and culture, public safety initiatives, neighborhood development programs, and education, including ASME's K-12 education work which, this year, will introduce hundreds of thousands of students—many from Title I schools—to the wonders of engineering and the limitless possibilities of an engineering career.

"Through this scholarship, I hope to support students who show promise, attract young talent to the profession, and encourage enrollment and active participation in standards development." Gerry Eisenberg

Individual Donor Snapshot: Gerry Eisenberg

ASME succeeds in part on the strength of its diverse and talented staff, but even among such a stellar group there are individuals whose dedication and commitment are worthy of special recognition. There is no better example of this generosity of spirit than Gerry Eisenberg.

Gerry Eisenberg has served ASME for nearly half a century and is currently Managing Director of the Standards and Engineering sector. Inspired by the commitment of his friend and longtime ASME standards and certifications volunteer Ken Balkey, Gerry stepped up with a significant gift to endow the ASME Gerald M. Eisenberg Family Scholarship Fund.

"I received high-quality mentoring from world-class experts on the value of standards," says Gerry. "My intent is to pay it forward to the next generation and contribute to the deeper understanding of the value of engineering standards. Through this scholarship, I hope to support students who show promise, attract young talent to the profession, and encourage enrollment and active participation in standards development."

Income from the Fund will be used to grant scholarships to undergraduate or graduate students majoring in accredited Mechanical Engineering or Mechanical Engineering Technology programs. Preference will be given to students with an interest in the benefits of consensus industry standards for mechanical engineering applications.

Gerry's generous contribution will not only ease the financial burden for future engineers who are pursuing an engineering education, in a larger sense this donation is an expression of optimism in the ability of engineers to build a better future, and a demonstration of his faith in ASME's mission to advance engineering for the benefit of humanity.





Archimedes Club

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 Guilev 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 & Robert Fallon 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 Elizabeth & K. Keith Roe Ester & Richard Rosenberg Ruth & Byron Schieber Allen Selz Evelyn & William Shoop Betsy & Terry Shoup Kathryne & Robert T. Simmons Susan H. Skemp Pamela & David J. Soukup John A. Swanson Chor W. Tan Ruthy & Keith B. Thayer Roy P. Trowbridge William A. Weiblen James D. Woodburn 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 **Timothy Adams** Mostafa Aghazadeh Todd Allen Sunao Aoki Mehdi Asheghi Bala Balachandran Kenneth Balkey Javid Bayandor David Beddow Tom Bell-Wright Lisa Bessler **Andrew Bicos** Keith Bloesch William Borter **Betty Bowersox** Elah Bozorg-Grayel M. Brackin Stephen Brunkhorst **Charles Bruny** Jian Cao Eleni Chatzi Thomas Costabile Warren Devries Philip Divietro Nicole Dyess Kornel Ehmann Gerry Eisenberg Nicholas Fezie Alvin Filstrup

Amy Fleischer Leroy Fletcher James Froula Vadim Gektin Bill Germuga Jeremy Gernand Kalan Guiley Krishna Gupta John Hallquist John Hasselmann Onik Hattacharyya **Bob Hauck** Mahantesh Hiremath Regina Hoffmann Debbie Holton Alex Hovne Patricia Hunt Madhusudan Iyengar Said Jahanmir Jennifer Jewers Bowlin Lingyun Jiang Michael Johnson Yogendra Joshi Martin Jun Shiva Kalidas Albert Kilert Barbara Klein Madiha Kotb Rudolf Landwaard Connie Lausten Karen Lee Shih-Chieh Lin Xinyu Liu

Kathleen Lobb

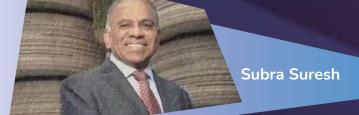
Paula Ludwigson Ravi Mahajan Robert Manross Richard Marboe Roger McCarthy Thomas Meehan Shreyes Melkote C. Dan Mote Thomas Mowry Nakamura Nakamura Wataru Nakayama Michael O'Connor Robert Pangborn Thomas Pestorius Harry Petrequin Allian Pratt Mary Lynn Realff Rvan Reardon Jovica Riznic K. Keith Roe Steven Rutter Johnson Samuel John Sare Jeff Schlosser **Anand Sethupathy** Steven Shaw Terry Shoup Robert Sims Robert Skaggs Susan Skemp Mark Smith Alba Sofi Walter Sperko Stuart Speyer

Scott Stallard Mary Grace Stefanchik Sathyan Subbiah John Sutherland John Swanson Keith Thaver Samuel Thomas **David Thompson** Alexander Vakakis Ganesan Venkatasubraman Daniel Waldorf Peng Wang Thomas Washburn Albert Wavering John Wentz Charla Wise Huayong Yang Justin Young Bingyi Yu Sam Zamrik Mohamed Zarrugh

Rixin Zhu

2020 HONORS & 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.



Subra Suresh was selected to receive the ASME Medal, established in 1920 as the Society's highest award, and given to recognize eminently distinguished engineering achievement. Dr. Suresh, who serves as president and distinguished university professor at Nanyang Technological University in Singapore, was honored for his exceptional contributions to the higher learning of engineering, and for his years of research in the underlying properties and performance of engineered and biological materials and their effects on human diseases. A Fellow of ASME, Dr. Suresh has been awarded 17 honorary doctorate degrees from universities spanning the globe.

The Medal was presented to Dr. Suresh during a virtual ceremony, which was held in conjunction with the ASME International Mechanical Engineering Congress and Exposition in November 2020.



HONORARY MEMBERS

Je-Chin Han, Sc.D., Fellow Farshid Sadeghi, Ph.D., Fellow Masayoshi Tomizuka, Ph.D., Fellow

ASME MEDAL

Subra Suresh, Sc.D., Fellow

ADAPTIVE STRUCTURES AND MATERIAL SYSTEMS AWARD

Wei-Hsin Liao, Ph.D., Fellow

BERGLES-ROHSENOW YOUNG INVES-TIGATOR AWARD IN HEAT TRANSFER

Amy Marconnet, Ph.D., Member

BLACKALL MACHINE TOOL & GAGE AWARD

ChaBum Lee, Ph.D.

PER BRUEL GOLD MEDAL FOR NOISE CONTROL AND ACOUSTICS

J. Stuart Bolton, Ph.D.

THOMAS A. EDISON PATENT AWARD

Shorya Awtar, Sc.D., Fellow

EDWIN F. CHURCH MEDAL

Nael Barakat, Ph.D., Fellow

DANIEL C. DRUCKER MEDAL Glaucio H. Paulino, Ph.D., Fellow WILLIAM T. ENNOR MANUFACTURING TECHNOLOGY AWARD

Ahmed A. Busnaina, Ph.D., Fellow

NANCY DELOYE FITZROY AND ROLAND V. FITZROY MEDAL

John A. Rogers, Ph.D.

FLUIDS ENGINEERING AWARD

Howard A. Stone, Ph.D., Member

FREEMAN SCHOLAR AWARD

Alfredo Soldati, Ph.D.

Y.C. FUNG EARLY CAREER AWARD

Matthew B. Fisher, Ph.D., Member

GAS TURBINE AWARD

Bogdan C. Cernat, Member

Marek Pátý

Cis De Maesschalck, Ph.D.

Sergio Lavagnoli, Ph.D., Member

KATE GLEASON AWARD

Lisa Burton O'Toole, Ph.D.

RICHARD J. GOLDSTEIN ENERGY LECTURE AWARD

James J. Truchard, Ph.D.

MELVIN R. GREEN CODES AND

STANDARDS MEDAL

Urey R. Miller, P.E., Fellow

HEAT TRANSFER MEMORIAL AWARDS

Terrence W. Simon, Ph.D., Fellow (SCIENCE)

Bahgat Sammakia, Ph.D., Fellow (ART)

Vishwanath Prasad, Ph.D., Fellow (GENERAL)

MAYO D. HERSEY AWARD

Bharat Bhushan, Ph.D., Fellow

PATRICK J. HIGGINS MEDAL

Mark C. Malburg, Ph.D., Member

HOLLEY MEDAL

Yogesh Jaluria, Ph.D., Fellow

SOICHIRO HONDA MEDAL

Asad M. Madni, Ph.D., Member

INTERNAL COMBUSTION ENGINE AWARD

André L. Boehman, Ph.D., Fellow

WARNER T. KOITER MEDAL

Anthony M. Waas, Ph.D., Fellow

ROBERT E. KOSKI MEDAL

Shinichi Yokota, D.Eng., Member

ALLAN KRAUS THERMAL MANAGEMENT MEDAL

Michael J. Ellsworth Jr.

FRANK KREITH ENERGY AWARD

Petros Sofronis, Ph.D., Fellow

BERNARD F. LANGER NUCLEAR CODES AND

STANDARDS AWARD

Annemarie Appleton, Member

GUSTUS L. LARSON MEMORIAL AWARD

Yuri Bazilevs, Ph.D., Member

H.R. LISSNER MEDAL

Larry A. Taber, Ph.D., Fellow

MACHINE DESIGN AWARD

Jian S. Dai, Ph.D., Fellow

CHARLES T. MAIN STUDENT LEADERSHIP AWARDS

Jad Hakim, Member (GOLD)

Adam Hernández-Miranda, Member (SILVER)

McDONALD MENTORING AWARD

Eduardo J. Barrientos, Ph.D., Member

M. EUGENE MERCHANT MANUFACTURING

MEDAL OF ASME/SME

Krishnamoorthy Subramanian, D.Sc., Fellow

VAN C. MOW MEDAL

Stavros Thomopoulos, Ph.D., Fellow

NADAI MEDAL

Frank Zok, Ph.D., Member

SIA NEMAT-NASSER EARLY CAREER AWARD

Baoxing Xu, Ph.D., Member

ROBERT M. NEREM EDUCATION AND MENTORSHIP MEDAL

Dawn Elliott, Ph.D., Fellow

BURT L. NEWKIRK AWARD

Sung-Hwa Jeung, Ph.D., Member

EDWARD F. OBERT AWARD

Henry A. Long III, Ph.D., Member Ting Wang, Ph.D., Fellow

OLD GUARD EARLY CAREER AWARD

Simon C. Pun. Member

RUFUS OLDENBURGER MEDAL

Mark W. Spong, D.Sc.

OUTSTANDING STUDENT SECTION ADVISOR AWARD

Jason Ash, Ph.D., Member

MARSHALL B. PETERSON AWARD

Zhou Chen, Ph.D., Member

PERFORMANCE TEST CODES MEDAL

William C. Wood, Member

JAMES HARRY POTTER GOLD MEDAL

Nagamangala K. Anand, Ph.D., Fellow

DIXY LEE RAY AWARD

Edward S. Rubin, Ph.D., Fellow

PI TAU SIGMA GOLD MEDAL

David G. Kwabi, Ph.D, Member

RALPH COATS ROF MEDAL

Bill Hammack. Ph.D.

CHARLES RUSS RICHARDS MEMORIAL AWARD

Katepalli R. Sreenivasan, Ph.D., Fellow

SAFETY CODES AND STANDARDS MEDAL

Barry Blackaby

R. TOM SAWYER AWARD

Sunao Aoki, Ph.D., Fellow

MILTON C. SHAW MANUFACTURING RESEARCH MEDAL

Jian Cao, Ph.D., Fellow

LAKSHMI SINGH EARLY CAREER LEADERSHIP AWARD

Columbia Mishra, Ph.D., Member

BEN S. SPARKS MEDAL

Michael M. Umbriac, Member

Jesse Austin-Breneman, Ph.D., Member

Daniel R. Cooper, Ph.D., Member

Panos Y. Papalambros, Ph.D., Member

RUTH AND JOEL SPIRA OUTSTANDING DESIGN E

DUCATOR AWARD

Jonathan Cagan, Ph.D., Fellow

J. HALL TAYLOR MEDAL

Don Frikken, Fellow

ROBERT HENRY THURSTON LECTURE AWARD

Andrew Alleyne, Ph.D., Fellow

TIMOSHENKO MEDAL

Mary C. Boyce, Ph.D., Fellow

WORCESTER REED WARNER MEDAL

Marco Amabili, Ph.D., Fellow

GEORGE WESTINGHOUSE MEDAL

Darrell W. Pepper, Ph.D., Fellow (GOLD)

SAVIO L-Y. WOO TRANSLATIONAL BIOMECHANICS MEDAL

Mehmet Toner, Ph.D., Fellow

HENRY R. WORTHINGTON MEDAL

S.Y. ZAMRIK PRESSURE VESSEL AND PIPING MEDAL

David L. Rudland, Ph.D., Fellow



The American Society Of Mechanical Engineers CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

June 30, 2021 and 2020



2021	2020
\$ 30,135,442	12,561,206
20,418,936	13,376,204
20,201,302	4,557,451
134,600,380	127,210,285
21,338,386	20,478,764
7,733,333	_
32,284,429	_
\$ 266,712,208	178,183,910
\$ 21,804,460	8,155,946
14,446,602	10,463,080
25 250 255	6 677 760
35,359,2//	6,677,762
16,517,038	21,642,538
7,707,055	8,665,985
_	9,324,283
23,500,000	_
119,334,432	64,929,594
126,321,768	96,709,826
21,056,008	16,544,490
147,377,776	113,254,316
\$ 266,712,208	178,183,910
\$	\$ 30,135,442 20,418,936 20,201,302 134,600,380 21,338,386 7,733,333 32,284,429 \$ 266,712,208 \$ 21,804,460 14,446,602 35,359,277 16,517,038 7,707,055 — 23,500,000 119,334,432 126,321,768 21,056,008 147,377,776

The American Society Of Mechanical Engineers CONSOLIDATED STATEMENTS OF ACTIVITIES

Years ended June 30, 2021 and 2020



	2021	2020
Net assets without donor restrictions:		
Operating revenue:		
Membership dues, publications, accreditation,		
conference fees, and other revenue by sector/ operating unit:		
Codes and standards	\$ 71,755,368	55,268,174
Conformity assessment	33,117,553	24,147,078
Learning and development	3,612,945	4,199,278
Philanthropic programs	1,371,637	1,012,768
Technical events and content	2,588,957	6,856,759
Publications	14,398,428	14,151,541
Constituent engagement	10,286,298	11,195,738
Miscellaneous revenue	11,885,153	345,537
Total operating revenue	149,016,339	117,176,873
Net assets released from restrictions	637,976	2,069,502
Total operating revenue and other support	149,654,315	119,246,375
Operating expenses:		2, 2,23
Program services by sector/operating unit:		
Codes and standards	39,233,497	18,475,625
Conformity assessment	14,139,249	15,204,493
Learning and development	4,207,079	7,372,495
Philanthropic programs	6,032,631	6,477,001
Technical events and content	10,316,245	14,244,838
Publications	10,196,095	11,453,908
Technology advancement and business	,,	22, 200, 200
development and industry events	3,835,916	4,082,811
Global public affairs	3,857,130	5,248,508
Constituent engagement	5,022,145	5,809,353
Total program services	96,839,987	88,369,032
Supporting services:		
Marketing	8,071,214	8,206,745
Sales and customer care	2,529,569	2,442,322
General administration	36,968,047	29,550,742
Total supporting services	47,568,830	40,199,809
Total operating expenses	144,408,817	128,568,841
Excess (deficit) of operating revenues over expenses	5,245,498	(9,322,466)
Nonoperating activities:		
Investment returns, net	24,010,671	1,664,993
Pension and post-retirement changes other than net		
periodic costs	317,424	(7,428,913)
Other components of net periodic costs	38,349	(80,464)
Total nonoperating activities	24,366,444	(5,844,384)
Increase (decrease) in net assets without donor restrictions	29,611,942	(15,166,850)
Net assets with donor restrictions:		
Contributions	1,190,458	313,945
Investment returns, net	3,988,006	338,202
Present value adjustment to annuities payable	(28,970)	(114,440)
Net assets released from restrictions		
Increase (decrease) in net assets with	(637,976)	(2,069,502)
donor restrictions	4,511,518	(1,531,795)
Increase (decrease) in net assets	34,123,460	(16,698,645)
Net assets at beginning of year	113,254,316	129,952,961
Net assets at end of year	\$ 147,377,776	113,254,316
	/	7

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 - 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

1828 L Street, NW

ASME – CHINA OFFICE

ASME Asia Pacific, LLC

Suite EF02, East Tower

Twin Towers

No. B12, Jianguomenwai Avenue

Chaoyang District Beijing, 100022 China Main: +86-10-5109-6032 Fax: +86-10-5109-6039

ASME - INDIA OFFICE

335, Udyog Vihar, Phase-IV

Fax: +91-124-430-8207

ASME - FOUNDATION

Two Park Avenue



