

AN OVERVIEW OF ASME

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ASME Mission:

To serve our diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life; and communicating the excitement of engineering.

ASME Vision:

ASME will be the essential resource for mechanical engineers and other technical professionals throughout the world for solutions that benefit humankind.

Core Values

In a rapidly changing global technological environment, our Mission, Vision and Core Values remain constant.

In performing its mission, ASME continues to adhere 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

For more information see: http://www.asme.org/about/Vision_Mission_Core_Values.cfm

ASME Strategic Priorities

The Society's Board of Governors has established the following three strategic priorities for achieving ASME's vision and mission:

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- Energy: To be a leading force for the advocacy and development of a balanced U.S. energy policy and support development of balanced energy policies in other areas of the world where ASME has influence.
- Global Impact: To be recognized as the world leader in mechanical engineering and multidisciplinary technology. This includes doubling activities that advance the ASME mission in our existing markets outside of the USA and Canada, and establishing significant activities in at least one new global area by 2014.
- Engineering Workforce Development: To expand the capacity and effectiveness of the engineering workforce by: actively promoting inter-engineering society collaboration to increase public awareness of the engineering profession; increasing the value of ASME for students and early career engineers through radical changes to their ASME experiences; and offering professional development programs to prepare a global engineering workforce to meet the challenges of tomorrow.

Keep your finger on the pulse of these and other ASME activities by reading ASME Connections.. ASME Connections highlights new initiatives that reflect the momentum of ASME's new strategies and objectives.

ASME Connections: <http://www.asme.org/About/Connections/>

Organization

ASME has adopted a cross-functional matrix, or horizontal, business model, and the Society's organizational framework consists of five parallel sectors which work collaboratively on cross-sector projects as well as produce and conduct the diverse and complex array of products and services for which our Society has earned its solid reputation. To maximize the potential of our matrix business model, ASME is investing in staff training for cross-sector projects, has identified strategic priorities that are cross-Sector in nature, and has created a support structure which now includes an enterprise-wide marketing and sales function.

ASME's sectors are: Knowledge and Community, Standards and Certification, Centers, Institutes, and Strategic Management, and their activities are described below.

Standards and Certification - ASME is one of the oldest standards-developing organizations in the world, with its first standard addressing measurement of steam boiler efficiency issued in 1884. It has approximately 500 standards that cover such areas as pressure equipment, nuclear power plant components, piping and pipelines, elevators, and engineering drawings. The standards are developed through the efforts of over 700 committees comprised of approximately 4,500 volunteer members, including over 10% from outside of the US. The work of the standards committees is managed by supervisory boards organized in the areas of pressure technology, nuclear installations, safety standards, dimensional standardization and performance test codes, new development (for new products that do not fall within the scope of the other supervisory boards), and conformity assessment. In 2009, an Energy and Environmental Standards Advisory Board was established to coordinate energy-related

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standards development, workforce development and certification activities with ASME's other sectors and stakeholders.

ASME standards are regularly revised to maintain technical and market relevance, and new ones are constantly created to address the needs of stakeholders, primarily industry and government. The ASME Standards Technology LLC may develop and provide relevant technical data for consideration during ASME's standards development and revision process. A request for a standard may come from individuals, committees, professional organizations, government agencies, industry groups, public interest groups, or from an ASME division or section. The request is referred to the appropriate supervisory board for consideration, and the board either assigns it to an existing standards committee, or forms a new one.

The standards committees are composed of engineers and other qualified individuals with knowledge and expertise in the particular field of activity, who agree to follow ASME's [Policy on Conflict of Interest](#) and the [Engineer's Code of Ethics](#). They represent users, manufacturers, consultants, universities, testing laboratories, insurance interests, government, and regulatory agencies. Committees are structured to ensure that no single interest group is allowed to dominate.

In order to enhance global relevance of ASME's standards, additional options for committee membership have been implemented to facilitate participation by qualified individuals outside of the U.S. and Canada. The Delegate position allows an individual to represent a group of technical experts outside of the U.S. and Canada that can meet in its own country and discuss and comment on ASME's standards in its native language. The International Interest Review Group of the Boiler and Pressure Vessel Committee encourages representation of national agencies that have accepted at least one section of ASME's Code as satisfying their regulatory requirements.

Committee meetings must be open to the public, and voting procedures must ensure that the group reaches consensus. These are among the guidelines issued by the American National Standards Institute (ANSI), the umbrella organization created to coordinate the more than 200 organizations in the U.S. that develop voluntary consensus standards. Also, if a materially interested party believes that due process was not observed, then under ANSI rules he or she may appeal to the standards committee, the supervisory board and, ultimately, to the ASME Board on Hearings and Appeals.

When a committee completes its work, the availability for public review and comment of the proposed standard is announced on the ASME web site and submitted for approval to the supervisory board and to ANSI. The committee must respond to all comments that are submitted during the public review period. When all considerations have been satisfied, the document is approved as an American National Standard, and published by ASME. All of the voting process and resolution of comments is accomplished via C&S Connect, ASME's web-based electronic tool.

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ASME's standards development procedures are consistent with the principles of international standards development, established by the World Trade Organization's Technical Barriers to Trade Committee. ASME standards are accepted for use in over 100 countries. Examples of ASME international standards are the Boiler and Pressure Vessel Code, the Bioprocessing Equipment Standard, and several Piping Codes.

Standards and Certification also administers twelve conformity assessment programs, where ASME evaluates whether an organization or individual demonstrates the capability of meeting the requirements of the relevant code or standard. These include product certification programs for boilers, pressure vessels, and nuclear power plant equipment; and personnel certification programs for operators of municipal waste combustion facilities and for geometric dimensioning and tolerancing professionals. There are ASME certified companies in over 70 countries.

ASME Training and Development (T&D) serves a broader training and professional development market across a large number of industries and strives to maintain robust platforms for conducting training live, on-site, on the web and globally through licensing programs. T&D is driven mainly by staff with an advisory board. T&D offers over 150 live and online courses, seminars, webinars and in-company training programs.

Standards and Certification in China and India

Standards and Certification is focused on the energy sector in China and India. Endeavors include collaboration with China and India government, private-sector oil and gas companies, nuclear power utilities, manufacturing sectors, standards development bodies, and regulatory agencies; translations of ASME standards and certification materials into Chinese; participation of technical experts from China and India on ASME standards committees; and use of local auditors for conformity assessment activities.

The ASME Asia Pacific, LLC, which was incorporated in December 2006 for the purpose of establishing and registering an office in Beijing, continues to serve as a base of operations to advance the Society's growth in China; including engineering workforce short courses and training seminars throughout the region. Offices in New Delhi and Brussels serve as bases for similar operations in other regions of the globe.

More information on ASME Standards & Certification can be found in the [June 2009 issue of ME Magazine](#), which featured the 125th anniversary of ASME codes and standards (<http://memagazine.asme.org/Articles/2009/june/>).

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Knowledge and Community - The K&C Sector provides an organizational and management structure for over 800 member units, serving as a resource and platform for enabling the member units to:

- Form collaborative efforts;
- Share best practices;
- Provide Forums for Outreach;
- Focus programs on critical issues (students, early career engineers, industry, emerging technologies, etc.); and
- Develop new business opportunities.

The Knowledge and Community (K&C) Sector is made up of a collection of member units that are aligned both geographically and technically. These units comprise technical divisions, sections, student sections, affinity groups and committees, self-forming groups and communities of practice. Their purpose is to stimulate the development, acquisition and dissemination of technical knowledge, provide opportunities for engineering practitioners to connect and to exchange ideas, and promote the advancement and professional development of our members. These units are all volunteer and member driven and, through their activities and programs, play a key role in furthering ASME's goals and objectives. The K&C Sector is managed by a board comprised of:

- A Senior Vice President
- 3 Operational Vice Presidents (Technical, Global and Affinity Communities)
- 2 Functional Vice Presidents (Programs & Activities and Financial Operations)
- 2 Committee Chairs (Communications and Representation & Governance)
- Managing Director (Staff position without vote)

The K&C Sector also includes an area for business development, or "Emerging Technologies." This area helps ASME expand its portfolio in the emerging fields of new technology as well as expand market share and relevance to specific customers in existing sectors. The area also serves as a staging ground for other units within the Society to attain Institute status. Current programs in the Emerging Technologies area include ASME's Nanotechnology, Fuel Cell and Bio-Process Seminars.

Centers - The Centers Sector is responsible for the mission-focused activities such as engineering education, leadership development, promotion of diversity and inclusion, professional development, professional practice, encouragement of ethical practice, and public awareness of engineering.

The Centers Sector is managed by a board comprised of:

- A Senior Vice President
- 4 Vice Presidents
- A Member-at-Large
- Managing Director (Staff position with vote)

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There are four individual Centers:

Public Awareness, which serves to inspire the future innovations and celebrate the past achievements of the mechanical engineering profession. The Center for Public Awareness consists of: the Committee on History & Heritage; the Committee on Pre-College Education; and the Committee on Strategic Communications. ASME's History & Heritage Committee is dedicated to chronicling and celebrating the achievements of the mechanical engineering profession. In the pre-college area the Society works to create a higher understanding of science, technology, engineering and math, and to inspire these students to embark on careers in engineering and other technical fields. Strategic Communications helps mechanical engineers participate more fully in working with the media and offers strategic focus for various communications activities.

Career and Professional Advancement (CCPA), assists the Society in meeting the professional, ethical, and developmental needs of its members. The CCPA has supervision of those activities related to student development, early career development, and professional development. In addition, CCPA supports development of ethics standards and reviews, facilitates society leadership development, student competitions, and works with the Old Guard Committee to enhance and support their mission with students and young engineers. Five Committees make up this Center: the Old Guard Committee; the Committee on Ethical Standards and Review; the Committee on Student Development; the Committee on Early Career Development; and the Committee on Professional Development and Licensure. This Center is responsible for competitions such as the ASME Human-powered Vehicle Challenge and the ASME-Boeing Student Design Competition to promote technical skills and ingenuity among university students.

Education, ASME believes that the future success of the mechanical engineering profession is tied to continuing education and lifelong learning. ASME directs its outreach to a range of constituencies from students in K-12 to professors of engineering in colleges and universities.

At the college level, ASME provides support and assistance for engineering students, faculty and the Accreditation Board for Engineering and Technology (ABET). Activities with college faculty, including heads of mechanical engineering departments, are designed to enhance curricula and teaching methods. The following Committees make up this Center:

- The Committee on Engineering Accreditation (CEA)
- The Committee on Technology Accreditation (CTA)
- The Mechanical Engineering Department Heads Committee (MEDHC)
- The Mechanical Engineering Technology Department Heads Committee (METDHC)
- The Student Loan Committee
- The Scholarship Committee
- The Graduate Teaching Fellowships Committee
- The Ben C. Sparks Award Committee
- The Research and Graduate Education Task Force

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- The Faculty & Student Advisor Development Task Force

Leadership and Diversity, which leads, facilitates, coordinates, and supports the activities of the Society relating to leadership development, mentoring, and diversity and outreach. The Center consists of the following Committees:

- The Committee on Strategy
- The Committee on Internship Programs
- The Committee on Diversity Programs
- The Committee on Diversity Metrics; and
- The Committee on Diversity Outreach

Among the initiatives in the Centers sector are the development of materials on Standards and Certification for university students, the recruitment of more graduate students into ASME, the promotion of the inclusion of students in mechanical engineering worldwide, and the advocacy for maintaining the current educational requirements for professional licensure.

Institutes – Providing a focused arena for business activities relevant to identified technical, educational or technological endeavors is the underlying purpose of ASME's Institutes sector. Institutes is involved with mature technical or educational areas, which still afford room for innovation. Institutes does this primarily through content-driven products and services such as conferences, workshops, seminars, courses, educational products, and publications.

The International Gas Turbine Institute (IGTI) achieved Institute status in 1986 and the International Petroleum Technology Institute (IPTI), formed in 2004. IGTI and IPTI both serve well-defined markets in their respective technology/industry sectors. IGTI and IPTI are led by volunteer boards that develop the overall strategic plan, and each has a Vice President to ASME.

IGTI serves the industry primarily through Turbo Expo, a Gas Turbine Users Symposium, Specialty Workshops and Conferences, contribution to two Journals, and by providing educational services and products as well as advocacy and awards programs. It is able to do this with over 15 technical committees and a dedicated staff of 8 based in Atlanta, GA.

IPTI serves the petroleum, offshore and pipeline industries through its three major events: the Offshore Technology Conference (OTC); Offshore Mechanics and Arctic Engineering Conference (OMAE); and the International Pipeline Conference (IPC). In addition, IPTI sponsors workshops and seminars, courses, a series of fundraising events (crawfish boils, golf tournaments), student and young engineer programs and awards. IPTI has a governing Board that coordinates the activities of three ASME Divisions - Petroleum; Ocean, Offshore and Arctic Engineering; and Pipeline Systems, each with a Board to manage the division's activities. They have an extensive volunteer network and a staff of 5 based in Houston, TX.

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Both institutes belong to the Institutes Sector Board, which expects to assist ASME in growth by meeting the following objectives:

- Serve as communication link to and from the ASME BOG.
- Facilitate the development of new Institutes.
- Share best practices among the Institutes and within ASME.
- Facilitate communications and awareness with other ASME Sectors.

Recommend mergers and acquisitions of outside organizations to become Institutes of ASME.

Conferences and Publications

ASME's many conferences and publications are primary vehicles for disseminating technical information to the engineering community. ASME sponsors and co-sponsors conferences in global markets, including China, India, Brazil, Mexico, the Middle East and Europe, with topics covering a broad spectrum of engineering subjects, from nuclear power and tribology to nanotechnology and biomedical devices. ASME's preeminent technical conference is the annual International Mechanical Engineering Congress and Expositions, bringing together many of the Society's technical divisions and volunteer leaders to discuss the state of the art in engineering and technology. ASME also sponsors symposia and workshops in specialized disciplines, and holds virtual seminars on its Web site www.asme.org.

ASME's extensive publishing operation is recognized in the international technical community. In addition to codes and standards, the Society publishes the proceedings to most of its larger conferences, making the content available either in print or CD-ROM. ASME also publishes more than 20 transaction journals which are distributed in print and online to subscribers to the ASME Digital Library. ASME Press, an imprint of ASME, releases engineering manuals and academic texts, in addition to guidebooks on some of the Society's codes and standards. ASME Press e-Books are also available in the Digital Library, a powerful online tool that allows cross-journal searching, extensive links to primary publishers and databases, and a complete suite of personalization tools.

Other publications include Mechanical Engineering monthly magazine, Mechanical Advantage – an online magazine for engineering students, and ASMENews, the Society's online newspaper.

Strategic Management - The Strategic Management Sector conducts programs and activities of the Society that provide:

- Technical advise and member views to government
- A voice for industry executives
- Insights on trends and issues expected to impact mechanical engineers and ASME
- Supports the Breakthrough Innovation Office and development of new ASME growth platforms

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The units of the Sector include the Board on Government Relations, the Industry Advisory Board, the Strategic Initiatives and Innovation Committee and the Strategic Issues Committee.

The following activities are spearheaded from the Strategic Management Sector:

- Industry Relations
 - Industry executive inputs on ASME’s strategic priorities
- ASME Innovates!
 - Innovation Showcase – annual educational program and competition for new product commercialization and entrepreneurship
 - Programs for engineering entrepreneurs
- Government Relations
 - Position Statements and Testimony
 - Congressional Noontime Briefings
 - Engineering Public Policy Symposium
 - Federal Fellows Program – places engineers in one-year positions in the federal government as technical advisors
 - WISE Student Interns
 - Capitol Update, a weekly electronic newsletter on public policy
- Breakthrough Innovation Office
 - Supports development of new growth platforms for ASME
- ASME Innovative Technologies Institute, LLC
 - Focus on homeland security
 - Risk Analysis and Management for Critical Asset Protection (RAMCAP)

Parliamentary Procedure – ASME uses parliamentary procedure to conduct many important meetings of the Society’s leadership. Parliamentary procedure is the main method used to organize meetings. This is governed by Roberts Rules of Order, which were created in 1876 by Henry Martyn Robert, an Army engineering officer.

VOLT Academy – The Volunteer Orientation Leadership Training (VOLT) Academy was created to be a resource for volunteer leaders throughout the society. The VOLT Academy works across all sectors of the society by helping to support leadership training events, developing and highlighting other training sources, and outlining the skills and resources needed for various levels of ASME leadership. VOLT conducts leadership orientations and training in strategic planning and Balanced Scorecard as well as identifies and develops volunteer trainers. The **Volunteer Opportunities Bulletin Board** (VOBB) also falls under VOLT as a tool to connect members with open volunteer positions across the Society.

Honors and Awards Program - The recognition of the excellence of an engineer’s work by his or her peers is one of the greatest rewards for accomplishment. By presenting these individuals with tokens of excellence, ASME brings the character and importance of the engineer’s work to the attention of the public. Accordingly, it is one of

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the major purposes of the Society to recognize engineering excellence through the Honors and Awards Program and to provide the forum for their exposition.

Society honors and awards recognize a wide variety of accomplishments. Some are based on contributions to engineering literature; others recognize general achievements in the advancement of engineering. Some are awarded for outstanding accomplishments by a young engineer beginning a career, other for distinguished service throughout a lifetime. Still others recognize contributions by outstanding Student Members.

For a listing of ASME Society Awards please go to:

[http://www.asme.org/Governance/Honors/SocietyAwards/List All Society Awards.cfm](http://www.asme.org/Governance/Honors/SocietyAwards/List_All_Society_Awards.cfm)

How to Nominate

The first step in making a nomination for a particular honor is to become completely familiar with the requirements to be met by the candidate for the honor, as given in the List of all Society Awards at

<http://www.asme.org/Governance/Honors/SocietyAwards/Nominate.cfm>. Comparison of the accomplishments of the candidate with the accomplishments of previous recipients of the honors will help the nominator in deciding whether to make a nomination.

Additional instructions on the nomination process can be found at <http://www.asme.org/Governance/Honors/SocietyAwards/Nominate>.

Who Selects ASME Honors Recipients?

The ASME Committee on Honors nominates the candidates for Honorary Membership and the ASME Medal to the Board of Governors. The Board of Governors, by unanimous vote, selects recipients of Honorary Membership and the ASME Medal. By direct delegation of the authority of the Board of Governors, the ASME Committee on Honors selects the recipients of all other ASME honors and awards.

For general achievement and literature awards, the General Awards Committee nominates the candidates to the ASME Committee on Honors for selection. For each special award, the relevant award committee nominates candidates to the ASME Committee on Honors for selection. In general, the Committee on Honors has the right of veto or of choice, but not the right of substitution for candidates who have been nominated by the General Awards Committee or Special Award Committees. For additional information on the Honors & Awards Program visit our website at http://www.asme.org/Governance/Honors/SocietyAwards/General_Information.cfm.

The ASME Nominating Committee - This committee is made up of volunteers from all five Sectors of the Society. The committee is charged with the responsibility of nominating members of experience, high standing, and active participation in the work of the Society. Any member of the Society or any organized unit of the Society is encouraged to propose nominees for President, the Board of Governors or Vice President. The Nominating Committee selects a slate of proposed nominees that are

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then presented to the membership to vote on via ballot. Once the ballots are counted the winners are announced at the first Business meeting of the fiscal year, typically held at the start of ASME's Congress.

Please visit the Nominating Committee Website for information on "How-to" run for society office.

http://www.asme.org/Governance/Nominating/Nominating_Committee.cfm

[The ASME Foundation](http://foundation.asme.org/) - <http://foundation.asme.org/>

In 1987, after several years of planning, the ASME Board of Governors founded The ASME Foundation as a way to maintain the Society's commitment to philanthropic service to ASME and to the mechanical and multidisciplinary engineering profession.

Our Purpose

The purpose of the Foundation is to fund leading-edge technical and human resource programs that promote the Society's efforts to improve the quality of life for all people. As an advocate for the mechanical engineering profession, the Foundation offers a venue for individuals, corporations, and organizations invested in technological advancement to make a difference by making a donation to the Foundation.

ASME members and others can make a gift to The ASME Foundation in a variety of ways, including to the annual appeal, by gifts to specific funds, or memorial/honorarium gifts. Gifts made be sent through the mail, or made through the Foundation website, www.foundation.asme.org/donate. The ASME Foundation also offers donors the opportunity to become a member of the Archimedes Club, which has been formed to recognize those who have created their own legacy through a planned gift to the Foundation. A planned gift can be made in the form of a bequest, or through a variety of other methods such as a charitable gift annuity. More information is available from the Foundation staff.

Foundation Leadership

The ASME Foundation is governed by a Board of Directors and Board of Trustees.

We foster a culture of philanthropy throughout ASME which enables us to nurture the future of mechanical engineering through funds raised. The Foundation supports the activities of the Society in three important ways:

- **Investing in the Future**
 - The ASME Foundation Scholarship Endowments
 - \$1.4 million in scholarships awarded to 500 students in the past ten years
- **Serving the Present**
 - The ASME Foundation Grants Program
 - Since 1998, \$1.7 million in funding has supported innovative ASME projects.
- **Honoring the Past**

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Through effective management of endowments which fund Honors and Awards, primarily at the Society level, the Foundation assists in recognizing excellence in engineering achievement. We also hold endowments for a number of Division level awards.

Engineering the Greater Good

The ASME Foundation is currently managing a capital campaign, *Engineering the Greater Good*, to raise operating and endowment funds in support of the ASME Federal Fellows Program. The goal of the campaign is \$5 million, and already the Foundation has received a significant support from both corporations and individuals.

The campaign is currently in a corporate phase, and you could help by recommending a corporation who might be interested and a senior level point of contact within that company. For more information on the campaign, check our website,

www.foundation.asme.org or contact

Judith Kearney, Director of Development, at kearneyj@asme.org

ASME ECLIPSE Program – The Early Career Leadership Intern Program to Serve Engineering (ECLIPSE) was developed in 2005 under the direction of the Center for Leadership & Diversity. This program is administered by the Committee on Internship Programs and is open to all units from every Sector of ASME. The objectives of this program are to:

- Expand the pool of future ASME leaders and develop their leadership capacity;
- Increase the number of female, non-traditional male and international ASME members in leadership positions; and
- Attract and retain young engineers from all backgrounds as ASME members through the development of role models and mentors.

Each internship lasts for one year. During that year all interns will have an opportunity to meet with their mentors and ASME leaders face-to-face at the Annual Meeting, the ASME Congress and the Leadership Training Conference. These gatherings will provide opportunities for orientation, teambuilding, networking, strengthening group dynamics and building camaraderie. All other communication takes place via the web and teleconference. Funds for intern travel are available through the program.

The ASME Auxiliary, Inc.

The ASME Auxiliary, Inc. established in 1923 and incorporated as a charitable non-profit organization in 1977, establishes and supports scholarships and loans to students of mechanical engineering at both the graduate and undergraduate levels. It also supports the objectives of ASME International to promote the advancement of the art, science and practice of mechanical engineering. Membership is open to all members of the immediate families of ASME International members, as well as members themselves. An Associate Membership is now available for all those persons interested in furthering the purpose of The Auxiliary.

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Objectives

To establish Educational Funds for the purpose of assisting worthy students in the study of Mechanical Engineering, or for graduate work.

To promote, independently or in conjunction with ASME, the advancement of the art and science of Mechanical Engineering and the dissemination to engineers, and the general public, of advances and new developments in Mechanical Engineering.

For more information contact RuthAnn Bigley at bigleya@asme.org or visit the website http://www.asme.org/Membership/Auxiliary/Auxiliary_Inc.cfm