CONTENTS

SECTION I – GENERAL INFORMATION	Nancy DeLoye Fitzroy and Roland V. Fitzroy Medal	
	Old Guard Early Career Award	
ASME HONORS POLICY2-4	Old Guard Prizes (4)	16-48
HONORS MANUAL2-3	Patrick J. Higgins Award	48
HOW TO NOMINATE FOR ASME HONORS3-4	Per Bruel Gold Medal for Noise Control and Acoustics	49
MEMORIAL FUND4	Performance Test Codes Medal	49
	Pi Tau Sigma Gold Medal	50
SECTION II – ASME AWARDS	R. Tom Sawyer Award	
	Ralph Coats Roe Medal	51
LISTING OF AWARDS5-14	Richard J. Goldstein Energy Lecture Award	52
SPECIAL AWARD COMMITTEES15-19	Robert E. Koski Medal	 52
	Robert Henry Thurston Lecture Award	
ACHIEVEMENT AWARDS	Robert M. Nerem Medal	53
	Rufus Oldenburger Medal	54
ASME Medal 20	Ruth and Joel Spira Outstanding Design Educator Award	
Adaptive Structures and Material Systems Award21	S.Y. Zamrik PVP Medal	
Allan Kraus Thermal Management Medal	Safety Codes and Standards Medal	
Barnett-Uzgiris Product Safety Design Award	Savio L-Y. Woo Translational Biomechanics Medal	
Ben C. Sparks Medal 22	Sia Nemat-Nasser Early Career Award	
Bergles-Rohsenow Young Investigator Award in Heat Transfer	Soichiro Honda Medal	
23	Spirit of St. Louis Medal.	
Bernard F. Langer Nuclear Codes and Standards Award23	Thomas A. Edison Patent Award	
Burt L. Newkirk Award	Timoshenko Medal	
Charles Russ Richards Memorial Award	Van C. Mow Medal	
Charles T. Main Student Leadership Awards (2)25-27	Warner T. Koiter Medal.	
Daniel C. Drucker Medal	Wilfred C. LaRochelle Conformity Assessment	
Dixy Lee Ray Award	William T. Ennor Manufacturing Technology Award	
Edwin F. Church Medal 29	Y. C. Fung Early Career Award	
Fluids Engineering Award 30	Yeram S. Touloukian Award	
Frank Kreith Energy Award 30	Terain S. Touroukian Awaru	01
George Westinghouse Medals 31	LITERATURE AWARDS	
Gustus L. Larson Memorial Award 32	LITERATURE AWARDS	
H.R. Lissner Medal 32	Arthur L. Williston Medal	60
Heat Transfer Memorial Award 33	Blackall Machine Tool and Gage Award	
Henry Laurence Gantt Medal 34	Edward F. Obert Award	
Henry R. Worthington Medal 34	Freeman Scholar Award	
Holley Medal 35	Gas Turbine Award	
Honorary Member 36	Henry Hess Early Career Publication Award	
Internal Combustion Engine Award	Melville Medal	
J.P. Den Hartog Award	Prime Movers Committee Award Worcester Reed Warner Medal	
	worcester Reed warner Medai	05
James Harry Potter Gold Medal	CEDVICE AWADDC	
James N. Landis Medal	SERVICE AWARDS	
	Dell'est 1 Con les Annal	70
Kate Gleason Award 40	Dedicated Service Award	
M. Eugene Merchant Manufacturing Medal of ASME/SME 40	Outstanding Student Section Advisor Award	70
Machine Design Award 41	CECTION III TOINE AWARDS	71 77
Marshall B. Peterson Award	SECTION III – JOINT AWARDS	11-72
Mayo D. Hersey Award 42	CECTION IV	
McDonald Mentoring Award	SECTION IV	-
	ASME NOMINATION COVER SHEET	
Melvin R. Green Codes and Standards Medal	ASME NOMINATION FORM	14-17
Milton C. Shaw Manufacturing Research Medal	TAIDEN/	70.50
Nadai Medal	<u>INDEX</u>	18-79

SECTION I

ASME HONORS POLICY

HONORS MANUAL

The purpose of this Honors Manual is to list the various honors and awards, including qualifications and past recipients, and to explain the procedures for granting them. The manual is divided into four main sections. This Introductory Section, pages 2 through 4, gives general information concerning honors and awards.

Section II, pages 5 through 19, gives details of all ASME awards. Table 1 on pages 5 through 14 gives an alphabetical listing of all ASME awards with condensed information concerning submission and consideration of nominations. Table 2 on pages 15 through 19 lists the Special Awards Committees. Beginning on page 20, a brief description of each honor and award with a list of past recipients is provided.

In addition to ASME's own awards, there are several other general awards for which ASME members may be eligible. These are summarized in Section III, pages 71 through 72. Finally, Section IV, on pages 73 through 77, gives a sample nomination form and suggestions for preparing an award nomination.

A major purpose of The American Society of Mechanical Engineers (ASME) is to:

"Promote the art and science of mechanical engineering and multidisciplinary engineering and allied sciences to diverse communities throughout the world..." (Constitution Article C2.1.1).

In pursuit of this purpose, the Society shall:

"Offer awards and other honors to encourage contributions to engineering; confer awards and other honors in recognition of meritorious contributions to engineering." (B2.1.).

The program of honors and awards is administered by the Board of Governors, by a Committee on Honors, by a General Awards Committee, and by several Special Award Committees, as authorized by By-Laws B5.2.8.1 and by Society Policies P-3.1 and by P-3.2.

The Committee on Honors (COH) is under the direction of the Board of Governors. It consists of nine Members or Fellows, preferably including a Past President and two Honorary Members or ASME Medalists. The General Awards Committee (GAC) screens nominations and makes recommendations to the Committee on Honors. It consists of nine Members or Fellows, representing the Technical Events and Conferences (TEC) Segments. Special Awards Committees (SAC) are usually associated with a particular honor or award. The SAC screen nominations and make recommendations to the COH and GAC.

At the discretion of the Committee on Honors, a nominee may be awarded an honor other than that for which they were nominated. A person shall not be considered for any honor or award during the term of office to which that person has been elected or appointed (or is entitled to ex officio) as a voting member of any Board, Committee, or other unit of the Society which has been assigned the duty to take a voted action on either one of these steps in the award selection process:

(a) to choose one or more nominees whose name will be sent to the unit which is charged with selecting the recipient of that award; or (b) to make the final selection of the recipient of that award. This restriction is not be circumvented by abstention from voting, by absence from a meeting, or by resignation from the unit. The Committee on Constitution and By-Laws noted that since the delegation by the Board of Governors to the Committee on Honors could be removed by the Board of Governors, in effect the Board of Governors still retains the ultimate authority for approval of all recipients of Society awards. Consequently, it was agreed that the exclusion does apply to the Board of Governors (February 23, 1981).

An individual will receive only one honor in recognition of the same achievement. The receipt of one ASME honor shall not bar the recipient from another ASME honor, provided it is for a different accomplishment. Careful consideration should be given when nominating an individual for Honorary Membership, as this honor recognizes a lifetime of service to engineering or related fields. Thus, the awarding of Honorary Membership may preclude receipt of another ASME honor at a later time.

Honors are not awarded posthumously except if a nominee's death occurs after the nomination has been received at ASME Headquarters. This policy is also recommended as applicable to ASME nominations for joint awards.

HOW TO NOMINATE FOR ASME HONORS

THE BASIC IMPORTANCE OF ASME HONORS

Recognition of outstanding achievement in engineering is one of the major objectives of the American Society of Mechanical Engineers, which it seeks to attain through its programs of honors and awards. Such programs provide the necessary and desirable recognition for outstanding contributions to the art and science of engineering. They give opportunity for personalized presentations to honor recipients, which dramatizes to the public the achievements of the engineers and identifies ASME with excellence in engineering.

The Society honors and awards fall into three main categories - those for achievement, those for contributions to engineering literature, and those for service to the Society. Achievement Awards may in turn be grouped into those available to all in the profession and those restricted to some special field within the profession. Similarly, Literature Awards may be considered in two groups - those available to all in the profession and those restricted to a specialized field.

Several ASME honors and awards have been conferred for more than half a century. These include the Achievement Awards of Honorary Membership (1880), the Charles T. Main Award (1919), the ASME Medal (1920), and the Holley Medal (1924). The oldest Literature Awards are the Henry Hess Early Career Publication Award (1914), the Melville Medal (1927), and the Worcester Reed Warner Medal (1930). Since 1930, sixty-eight additional awards have been established.

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 Section II. Comparison of the accomplishments of the candidate with the accomplishments of previous recipients of the honor will help the nominator in deciding whether to make a NOMINATION. Section IV contains detailed instructions for preparing a NOMINATION. The nominator should study and follow these carefully, so that the relevant accomplishments of the candidate will be properly presented. The suggested format stresses the importance of a clear, precise narrative and description of the accomplishments of the candidate and a complete listing of both the ASME activities and the honors he or she has been awarded.

WHO MAY NOMINATE

Any individual member or committee may nominate candidates for any Society honor or award or any Joint Award as listed in this Manual, except individual voting members of the Board of Governors (BOG), Committee on Honors (COH), or General Awards Committee (GAC), and other committees which sit in judgment on the nominations, unless it is the committee's responsibility to develop honors material. A nomination by a non-member is referred to the proper ASME body for action.

THE IMPORTANCE OF THE NOMINATION IN FORM AND CONTENT

Each recipient of an honor or award may be an eminently worthy candidate. It is therefore the duty and responsibility of each member to bring forward outstanding candidates of whose work and accomplishments he or she has personal knowledge. It is a serious mistake to assume that "they" - meaning the honor committee or the ASME leadership in general – "know all about the nominee." The enormous scope of ASME activities and its large membership make it essential that award selection

boards be provided with the necessary complete information for judging the nominations. Thus, the judges must have thorough and well-prepared NOMINATIONS. Remember also that "they", the honor committee or the ASME leadership in general, may be, in most cases, ineligible to make NOMINATIONS or sponsor candidates for honors and awards.

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 the 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 by unanimous vote.

For the general Achievement and Literature Awards, the GAC nominates the candidates to the COH for selection. For each special award, the relevant award committee nominates candidates to the COH for selection. In general, the COH has the right of veto or of choice but not the right of substitution for candidates who have been nominated by the GAC or Special Awards Committee (SAC).

MEMORIAL FUND

As a result of an item on the 1973 National Agenda, a Memorial Fund was established whereby contributions may be made in memory of deceased Society Members. These contributions are being accumulated and, when sufficient funds are available, a suitable permanent memorial will be created in remembrance of an outstanding Member of the Society.

Contributions may be sent to the ASME Memorial Fund along with an indication of the person to be memorialized. Cards of acknowledgment are sent to a close relative of the person in whose name the contribution is made as well as to the donor. Contributions to the fund are tax deductible.

SECTION II

ASME AWARDS

Any individual member or group of members or committee may nominate candidates for any awards listed in this Manual. Table 1, on pages 5 through 14, summarizes the awards. Most of the column headings and information should be self-explanatory. Abbreviations used include "COH" for Committee on Honors, "GAC" for General Awards Committee, and "SAC" for each Special Awards Committee. Nominations submitted to COH or GAC should be sent to:

ASME Honors Office Two Park Avenue New York, NY 10016

Nominations submitted to an SAC may be sent either to the ASME Honors Office or directly to the SAC. Nomination deadlines are absolute; completed applications must have been received by the deadline date. Months January through March refer to the calendar year of the award; all other months refer to the year preceding the year of the award.

Table 2, on pages 15 through 19, lists the Special Award Committees and the technical activity or other activity responsible for manning each committee. Pages 20 through 70 give brief accounts of each award with a list of past recipients. Members of committees who require a more detailed analysis of any particular award may request it from the ASME Honors Office at the above address.

TABLE 1

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
ASME Medal (Page 20)	Eminently distinguished engineering achievement	\$15,000 Gold Medal Certificate \$750 Expense Supplement	None	March 1	СОН	COH/BOG March 1
Adaptive Structures and Material Systems Award (Page 21)	Significant contributions to the sciences and technologies associated with adaptive structures and/or materials systems	\$2,000 Vermeil Medal Certificate	Must be a senior researcher with significant contributions	October 1	SAC	COH March 1
Allan Kraus Thermal Management Medal (Page 21)	Demonstration of outstanding achievements in thermal management of electronic systems and their commitment to the field of thermal science and engineering	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	None	January 15	SAC	COH March 1
Arthur L. Williston Medal (Page 62)	The best paper submitted in the annual competition on a subject chosen to challenge the engineering abilities of engineering students in conformance with the annual contest guidelines See Current Contest Flyer: https://www.asme.org/about-asme/get-involved/honors-awards/literature-awards/arthur-l-williston-medal	1st: \$1,000 Bronze Medal Certificate \$750 Expense Supplement 2nd: \$500 Certificate 3rd: \$250 Certificate	Student Member or Member (graduated not more than 2 years), ASME sponsor	March 1	GAC	COH March 1

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/ Committee on Honors (COH)/ General Awards Committee (GAC)
Barnett-Uzgiris Product Safety Design Award (Page 22)	Significant contributions to the safe design of products through teaching, research, and professional accomplishments	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	None	February 1	SAC	GAC/COH March 1
Ben C. Sparks Medal (Page 22)	Eminent service to engineering education and mechanical engineering technology education through outstanding contributions that bring innovative, authentic, practice-based, engineering design/build experiences to undergraduate students	\$1000 Bronze Medal Certificate \$750 Expense Supplement	Nominees must hold or have held academic appointments in departments that have ABET- accredited or substantially equivalent degree programs or be engineers in industry, government, or private practice	SepteGleaamber 1	SAC	COH October 1
Bergles- Rohsenow Young Investigator Award in Heat Transfer (Page 23)	Commitment to pursuing research in heat transfer, as well as demonstration of the potential to make significant contributions to the field of heat transfer	\$1,000 Bronze Medal Certificate	Candidate under 36, with Ph.D. or equivalent degree in engineering	October 1	SAC	GAC/COH March 1
Bernard F. Langer Nuclear Codes and Standards Award (Page 23)	Contributions to the nuclear power plant industry through the development and promotion of ASME Nuclear Codes and Standards or the ASME Nuclear Certification Program	\$1,000 Crystal Oracle Certificate	None	February 1	SAC	COH March 1
Blackall Machine Tool and Gage Award (Page 63)	Best current original paper or papers (not published elsewhere) that has/have been presented before ASME and/or published by ASME during the 2 calendar years immediately preceding the year of the award; the paper(s) should contribute to the design or application of machine tools, gages or dimensional measuring instruments, or new technologies and metrology approaches	\$1,000 Plaque	Paper presented before ASME and/or published by ASME during the 2 calendar years immediately preceding the year of award	February 1	SAC	GAC/COH March 1
Burt L. Newkirk Award (Page 24)	Notable contributions to tribology in research or development as established by papers accepted for publication	\$1,000 Certificate	Author under 40 and an ASME member at time of nomination	February 1	SAC	GAC/COH March 1

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)
Charles Russ Richards Memorial Award (Page 25)	Outstanding achievement in mechanical engineering 20 years or more following graduation Special Nomination form required: https://www.asme.org/about-asme/participate/honors-awards/achievement-awards/charles-russ-richards-memorial-award	\$1,000 Certificate \$750 Expense Supplement	The nominee must be a person who, on July 1 of the year of the award, has graduated not fewer than 20 years from the regular baccalaureate engineering curriculum	February 15	SAC	COH March 20
Charles T. Main Student Leadership Awards (Pages 25-27)	Leadership and service qualities contributing to programs and operations of an ASME Student Section Special Nomination form required: https://www.asme.org/about-asme/participate/honors-awards/achievement-awards/charles-t-main-student-section-awards	1st: \$3,000 Gold Medal Certificate \$750 Expense Supplement 2nd: \$2,000 Silver Medal Certificate Expense Supplement Up to 8 Honorable Mentions: \$500	Undergraduate ASME Student Member leadership and service qualities must have contributed, for a period of more than 1 year, to the programs and operations of a Student Section of Society, to his/her department activities and other related activities	March 1	GAC	GAC/COH March 15
Daniel C. Drucker Medal (Page 28)	Distinguished contribution to the field of applied mechanics and mechanical engineering	\$2,000 Bronze Medal Certificate \$750 Expense Supplement	None	September 15	SAC	COH March 1
Dedicated Service Award (Page 70)	Unusual dedicated voluntary service to the Society marked by outstanding performance, demonstrated effective leadership, prolonged and committed service, devotion, enthusiasm and faithfulness Special Nomination form required: https://www.asme.org/about-asme/participate/honors-awards/service-awards/dedicated-service-award	Plaque Certificate Lapel Pin	Minimum of 10 years of service to ASME	December 1	Appropriate Society Officer	Designated Service Area staff COH
Dixy Lee Ray Award (Page 28)	Significant achievements and contributions in environmental protection	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	None	February 1	SAC	COH March 1
Edward F. Obert Award (Page 64)	Outstanding paper on thermodynamics presented during the preceding 2 calendar years	\$5,000 Certificate \$750 Expense Supplement	Must be written during preceding 2 years of Congress presentation	March 1	SAC	COH April 1

Name of Award	Requirements	Form of Award	Limitation(s)	Send To Special Award Committee (SAC)	Send To	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
Edwin F. Church Medal (Page 29)	For an individual who has rendered eminent service in increasing the value, importance and attractiveness of mechanical engineering education Special Nomination form required: https://www.asme.org/about-asme/participate/honors-awards/achievement-awards/edwin-f-church-medal	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	Services performed within context of an individual's normal employment are not eligible. Service should be above and beyond normal employment	September 1	SAC	GAC/COH Oct 1
Fluids Engineering Award (Page 30)	Outstanding contributions, over a period of years, to the engineer profession and especially to the field of fluids engineering through research, practice, and/or teaching	\$1,000 Bronze Medal Certificate	None	September 30	SAC	GAC October 15
Frank Kreith Energy Award (Page 30)	Significant contributions to a secure energy future with particular emphasis on innovations in conservation and/or renewable energy	Bronze Plaque Certificate \$750 Expense Supplement	None	December 1	SAC	COH March 1
Freeman Scholar Award (Page 64)	Significant expertise in fluids engineering	\$10,000 Certificate \$750 Expense Supplement	None	September 1	SAC	COH October 15
Gas Turbine Award (Page 65)	Outstanding individual- or multiple-author contribution to the literature of combustion gas turbines or gas turbines thermally combined with nuclear or steam power plants.	\$1,000 Plaque	None	June 1	SAC	GAC/COH October 1
George Westinghouse Medals (Page 31)	Eminent achievement or distinguished service in the power field of mechanical engineering, including contributions of utilization, application, design, development, research, and the organization of such activities in the power field	Gold: \$1,500 Vermeil Medal Certificate \$750 Expense Supplement Silver: \$1000 Silver Medal Certificate \$750 Expense Supplement	Silver Medal to one under 45 years of age on June 30 of the year the in which the medal is awarded	February 1	SAC	COH March 1

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
Gustus L. Larson Memorial Award (Page 32)	The award honors engineering graduates for outstanding achievements in mechanical engineering between 10 to 20 years after graduation.	\$1,000 Certificate \$750 Expense Supplement	The nominee must be a person who, on July 1 of the year of the award, graduated not more than 20 years and not fewer than 10 years from the regular baccalaureate engineering curriculum	February 15	SAC	COH March 20
H.R. Lissner Medal (Page 32)	Outstanding achievements in the field of bioengineering	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	Candidate must be an active member of the Bioengineering Division	September 1	SAC	COH October 15
Heat Transfer Memorial Award (Page 33)	Outstanding contribution to the field of heat transfer through teaching, research, practice and design, or a combination of such activities	\$1,000 Plaque Certificate	None	October 1	SAC	GAC/COH March 1
Henry Hess Early Career Publication Award (Page 66)	Best original technical paper presented to or published by the Society during the 2 calendar years prior to the year of award by a Student Member or Member who was not yet 35 years of age at the time the paper was submitted to the Society	\$2,500 Certificate \$750 Expense Supplement	ASME Student Member or Member, under age 35 (or 10 years after terminal degree) at time paper was published by Society	March 1	GAC	GAC/COH March 1
Henry Laurence Gantt Medal (Page 34)	Distinguished achievement in management and for service to the community	\$1,000 Bronze Medal Certificate	None	February 1	SAC	COH March 1
Henry R. Worthington Medal (Page 34)	Eminent achievement in the field of pumping and machinery systems and concepts	\$5,000 Bronze Medal Certificate \$750 Expense Supplement	None	September 30	SAC	COH October 15
Holley Medal (Page 35)	Unique act(s) of an engineering nature, accomplishing a timely public benefit	\$1,000 Vermeil Medal Certificate Lapel Pin	None	March 1	GAC	GAC/COH March 1
Honorary Member (Page 36)	Distinguished contributions to engineering, science, industry, research, public service, or other pursuits allied with and beneficial to the engineering profession	Silver Medal Certificate Lapel Pin Badge \$750 Expense Supplement	Must be an ASME Member. No more than 5 honorees per year	March 1	СОН	COH/BOG March 1
Internal Combustion Engine Award (Page 37)	Eminent achievement or distinguished contribution over a substantial period of time, which may result from research, innovation, or education in advancing the art of engineering in the field of internal combustion engines	\$1,000 Plaque	None	February 1	SAC	GAC March 1

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
J.P. Den Hartog Award (Page 37)	Lifetime contributions to the teaching and practice of vibration engineering	\$3,000 Bronze Medal Certificate	None	July 31 Even Years	SAC	COH March 1
J. Hall Taylor Medal (Page 38)	Eminent achievement in ASME Codes and Standards for piping and pressure vessels	\$1,000 Bronze Medal Certificate	None	November 15	SAC	COH March 1
James Harry Potter Gold Medal (Page 38)	Eminent achievement in the science of thermodynamics and its applications in mechanical engineering	\$2,000 Vermeil Medal Certificate	None	February 1	SAC	COH March 1
James N. Landis Medal (Page 39)	Outstanding personal performance related to designing, constructing, or managing the operation of major steam-powered electric stations using nuclear or fossil fuels.	\$7,500 Bronze Medal Certificate \$750 Expense Supplement	None	February 1	SAC	COH March 1
Johnson & Johnson Consumer Companies, Inc. Medal (Page 39)	Outstanding contributions by an individual, company, government entity, school, or other organization toward developing and implementing practices, processes and programs that value and strategically manage diversity and inclusiveness	\$2,000 Bronze Medal Certificate \$750 Expense Supplement	Member of ASME or other recognized engineering /professional society; no involvement in litigation related to discrimination or harassment within the past 3 years	February 1	SAC	COH March 1
Kate Gleason Award (Page 40)	For the contribution of distinguished female leaders in the engineering profession	\$2,000 Bronze Medal Certificate \$750 Expense Supplement	Only female engineers are eligible	Award suspended	SAC	СОН
M. Eugene Merchant Manufacturing Medal of ASME/SME (Page 40)	An individual who has had significant influence and responsibility for improving productivity and efficiency (either by research or by implementation of research) of the manufacturing operation(s)	\$1,500 Vermeil Medal Certificate	None	January 1	SAC	COH March 1
Machine Design Award (Page 41)	Eminent achievement in machine design	\$1,000 Plaque Certificate	None	February 1	SAC	COH March 1
Marshall B. Peterson Award (Page 41)	Early-career achievement in research as demonstrated by papers published in scientific journals of ASME and promise for pursuit of research in tribology	\$2,500 Certificate	Under 30 years of age at time award is given (October of even-numbered years)	February 1 (biennially)	SAC	COH March 1

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
Mayo D. Hersey Award (Page 42)	Distinguished contributions to the advancement of the science and engineering of tribology	\$2,000 Plaque	None	February 1	SAC	COH March 1
Patrick J. Higgins Award (Page 48)	Enhancement of standardization through contribution to the development and promotion of ASME Codes and Standards or Conformity Assessment Programs	\$1,000 Bronze Medal Certificate	Advancement of ASME codes, standards and conformity assessment	September 1	SAC	COH October 1
McDonald Mentoring Award (Page 43)	Outstanding mentoring of other professionals by an engineer in industry, government, education or private practice	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	Must be a Member of ASME, or another ICOMES Member Society, for at least 5 years	February 1	SAC	COH March 1
Melville Medal (Page 67)	Best current original paper (Medal can also be bestowed on winner of another best paper award)	\$2,000 Bronze Medal Certificate \$750 Expense Supplement	One author must be a Corporate Member of ASME	March 1	GAC	GAC/COH March 1
Melvin R. Green Codes and Standards (Page 43)	Outstanding contributions to the development, promulgation, or management of documents, objects, or devices used in ASME programs of technical codification, standardization, and conformity assessment, or the acceptance of ASME Codes and Standards within the United States or internationally	\$1,500 Bronze Medal Certificate	None	January 1	SAC	COH March 1
Milton C. Shaw Manufacturing Research Medal (Page 44)	Significant fundamental contributions to the science and technology of manufacturing processes	\$1,500 Bronze Medal Certificate	None	February 1	SAC	COH March 1
Nadai Medal (Page 44)	Distinguished contributions to the field of engineering materials	\$1,000 Medal Certificate	None	February 15	SAC	COH March 1
Nancy DeLoye Fitzroy and Roland V. Fitzroy Medal (Page 45)	Pioneering contributions to engineering leading to breakthroughs in existing technology or leading to new applications or new areas of engineering	\$3,000 Bronze Medal Certificate \$750 Expense Supplement	None	February 1	SAC	COH March 1
Old Guard Early Career Award (Page 45)	Recognizes outstanding early career engineers who have advanced quickly in their professional careers, have participated in advancing their education, have shown leadership in ASME activities and have volunteered actively in their communities	1st: \$5,000 Plaque Prepaid Life Membership 2nd & 3rd: \$2,000 Plaque Prepaid Life Membership	Student Member who upgraded to Member after graduation and is within 4 to 8 years after baccalaureate degree	February 1	SAC	COH March 1
Old Guard Prizes for ASME Student Members (Page 45-48)	Best 4 oral presentations at Student Contest at the IMECE	1st: \$2,000 2nd: \$1,500 3rd: \$1,000 4th: \$500 Certificate \$750 Expense Supplement	Student Members	n/a	SAC	COH Congress

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
Outstanding Student Section Advisor Award (Page 70)	Outstanding leadership and service qualities to the program and operations of a Student Section for at least 3 years	\$1,500 Silver Medal Certificate \$750 Expense Supplement	Must have completed at least 3 academic years as a Student Section Advisor prior to nomination for the award	March 1	GAC	GAC/COH March 15
Per Bruel Gold Medal for Noise Control and Acoustics (Page 49)	Eminent achievement and extraordinary merit in the field of noise control and acoustics	\$1,000 Vermeil Medal Certificate \$750 Expense Supplement	None	February 1	SAC	COH March 1
Performance Test Codes Medal (Page 49)	Significant contributions to the development and promotion of ASME Performance Test Codes	\$1,000 Vermeil Medal Certificate	None	January 1	SAC	COH March 1
Pi Tau Sigma Gold Medal (Page 50)	Outstanding achievement in mechanical engineering within 10 years following graduation Special Nomination form required: https://www.asme.org/about-asme/participate/honors-awards/achievement-awards/pi-tau-sigma-gold-medal	\$1,000 Gold Medal Certificate \$750 Expense Supplement	Nominee must be a person who, on July 1 of the year of the award, has graduated no more than 10 years from the regular baccalaureate engineering curriculum	February 15	SAC	COH March 20
Prime Movers Committee Award (Page 68)	Outstanding contributions to the literature of thermal electric station practice or equipment that are available through public presentation and publication. Papers approved by the appropriate papers review committee as meeting ASME standards and available in printed form may be considered for this award. Papers, while usually current, need not necessarily be so, and may be by a single or multiple authors	\$1,000 Certificate	None	February 1	SAC	COH March 1
R. Tom Sawyer Award (Page 51)	Outstanding contributions to advance the purpose of the Gas Turbine Industry and to the International Gas Turbine Institute over a substantial period of time	\$1,000 Plaque Certificate	None	January 1	SAC	COH October 1
Ralph Coats Roe Medal (Page 51)	Significant contributions to public understanding and appreciation of engineering's worth to society	\$12,000 Gold Medal Certificate \$750 Expense Supplement	None	September 15	SAC	COH October 1
Richard J. Goldstein Energy Lecture Award (Page 52)	For pioneering contributions to the frontiers of energy leading to a breakthrough(s) in existing technology, leading to new applications or new areas of engineering endeavor, or leading to policy initiatives	\$10,000 Bronze medal Certificate \$750 Expense Supplement	None	February 1	SAC	COH March 1

Name of Award	Requirements	Form of Award	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
Robert M. Nerem Education and Mentorship Medal (Page 53)	Extraordinary and sustained level of lifetime achievement in the field of bioengineering education and mentoring	\$1000 Bronze Medal Certificate \$750 Expense Supplement	Ph.D. or equivalent terminal degree in any field of engineering, physics, medicine or life sciences; Must be active member of ASME Bioengineering Division	September 1	SAC	COH October 15
Robert E. Koski Medal (Page 52)	Advancing the art and practice of fluid power motion and control through education and/or innovation	\$10,000 Bronze Medal Certificate \$750 Expense Supplement	None	February 11	SAC	COH March 1
Robert Henry Thurston Lecture Award (Page 53)	Outstanding leader in pure or applied science or engineering	\$500 Plaque Certificate \$750 Expense Supplement	None	January 15	SAC	COH March 15
Rufus Oldenburger Medal (Page 54)	Outstanding lifetime achievements in automatic control	\$2,000 Bronze Medal Certificate	None	February 1	SAC	COH March 1
Ruth and Joel Spira Outstanding Design Educator Award (Page 54)	Exemplifies the best in furthering engineering design education	\$1,000 Vermeil Medal Certificate	None	February 1	SAC	COH March 1
S.Y. Zamrik PVP Medal (Page 55)	Outstanding contribution in the field of pressure vessels and piping technology	\$4,000 Bronze Medal Certificate	None	June 15	SAC	COH October 1
Safety Codes and Standards Medal (Page 55)	Development and promotion of safety codes and standards, or safety accreditation activities	\$1,500 Bronze Medal Certificate	None	January 1	SAC	COH March 1
Savio L-Y. Woo Translational Biomechanics Medal (Page 56)	Translation of meritorious bioengineering science to clinical practice through research, education, professional development, and service to the bioengineering community	\$5,000 Bronze Medal Certificate \$750 Expense Supplement	Must be an active member of BED	September 1	SAC	COH March 1
Sia Nemat- Nasser Early Career Award (Page 56)	Excellence in the areas of experimental, computational, and theoretical mechanics and materials	\$3,000 Medal Certificate \$750 Expense Supplement	Within 10 years of Ph.D. degree	February 15	SAC	COH March 1
Soichiro Honda Medal (Page 57)	Outstanding achievement or a series of significant contributions in the field of personal transportation	\$7,500 Vermeil Medal Certificate \$750 Expense Supplement	None	October 1	SAC	COH March 1
Spirit of St. Louis Medal (Page 57)	Meritorious service in the advancement of aeronautics and astronautics	\$1,000 Vermeil Medal Certificate	None	January 1	SAC	COH March 1
Thomas A. Edison Patent Award (Page 58)	Creativity of a patented device or process that has the potential of significantly enhancing some aspect of mechanical engineering	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	The patent must have been registered in the U.S.	February 1	SAC	COH March 1

Name of Award	Requirements	Form of AwarFd	Limitation(s)	Nomination Deadline	Send To Special Award Committee (SAC)	Awarded By Board of Governors (BOG)/Committee on Honors (COH)/ General Awards Committee (GAC)
Timoshenko Medal (Page 58)	Distinguished contributions to the field of applied mechanics	\$2,500 Bronze Medal Certificate \$750 Expense Supplement	None	September 15		COH March 1
Van C. Mow Medal (Page 59)	Meritorious contributions to the field of bioengineering	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	Ph.D. or equivalent degree received between 10 and 20 years prior to June 1st of the year of award	September 1	SAC	COH October 15
Warner T. Koiter Medal (Page 59)	Distinguished contributions to the field of solid mechanics with special emphasis on the effective blending of theoretical and applied elements of the discipline and on a high degree of leadership in the international solid mechanics community	\$2,000 Bronze Medal Certificate \$750 Expense Supplement	None	September 15	SAC	COH March 1
Wilfred C. LaRochelle Conformity Assessment Award (Page 60)	Distinguished service in the area of Conformity Assessment, including but not limited to the establishment, advancement and promotion of ASME's Product & Personnel Certification and Accreditation Programs	\$1,000 Bronze Medal Certificate	None	February 1	Board on Conformity Assessment Honors and Awards Committee	COH March 1
William T. Ennor Manufacturing Technology Award (Page 60)	Presented to an individual or team of individuals for developing or contributing significantly to innovative manufacturing technology, the implementation of which has resulted in substantial economic and/or societal benefits	\$1,000 Vermeil Medal Certificate	None	February 1	SAC	COH March 1
Worcester Reed Warner Medal (Page 69)	Outstanding contribution to the permanent literature of engineering	\$2,000 Vermeil Medal Certificate	Literature must be at least 5 years old	March 1	GAC	COH March 1
Y.C. Fung Early Career Award (Page 61)	Recognizes young investigators who are committed to pursuing research in the field of bioengineering	\$1,000 Bronze Medal Certificate \$750 Expense Supplement	Active member of the Bioengineering Division, with Ph.D. or equivalent degree in any field of engineering, physics, medicine or life sciences, that was received less than 10 years prior to June 1 of the year the award is conferred	September 1	SAC	COH October 15
Yeram S. Touloukian Award (Page 61)	Outstanding technical contributions in the field of thermophysical properties	Bronze Medal Certificate \$750 Expense Supplement (Triennial)	None	September 1	SAC	COH October 15

SPECIAL AWARD COMMITTEES

AWARD	TECHNICAL DIVISION OR OTHER SPONSOR	NAME OF COMMITTEE
Adaptive Structures and Materials Systems Award	Aerospace Division (AD)	Adaptive Structures and Material Systems Award Committee
Allan Kraus Thermal Management Medal	Electronic Packaging Division (EPD)	Allan Kraus Thermal Management Medal Committee
Barnett-Uzgiris Product Safety Design Award	Design Engineering Division (DED)	Barnett-Uzgiris Product Safety Design Award Committee
Ben C. Sparks Medal	Committee on Education	Ben C. Sparks Medal Committee
Bergles-Rohsenow Young Investigator Award in Heat Transfer	Heat Transfer Division (HTD)	Bergles-Rohsenow Young Investigator Award in Heat Transfer Committee
Bernard F. Langer Nuclear Codes and Standards Award	Board on Nuclear Codes and Standards	Bernard F. Langer Nuclear Codes and Standards Award Committee
Blackall Machine Tool and Gage Award	Manufacturing Engineering Division (MED)	Blackall Machine Tool and Gage Award Committee
Burt L. Newkirk Award	Tribology Division (TRIB)	Tribology Division Honors and Awards Committee
Charles Russ Richards Memorial Award	Pi Tau Sigma and Committee on Honors	Pi Tau Sigma Award Committee
Charles T. Main Student Leadership Awards	General Awards Committee (GAC)	General Awards Committee
Daniel C. Drucker Medal	Applied Mechanics Division (AMD)	Daniel C. Drucker Medal Committee
Dixy Lee Ray Award	Environmental Systems Division (ESD)	Dixy Lee Ray Award Committee
Edward F. Obert Award	Advanced Energy Systems Division (AESD)	Edward F. Obert Award Committee
Edwin F. Church Medal	General Awards Committee (GAC)	Edwin F. Church Medal Committee
Frank Kreith Energy Award	Solar Energy Division and Advanced Energy Systems Divisions (SED & AESD)	Frank Kreith Energy Award Selection Committee
Fluids Engineering Award	Fluids Engineering Division (FED)	Fluid Engineering Award Committee

AWARD	TECHNICAL DIVISION OR OTHER SPONSOR	NAME OF COMMITTEE
Freeman Scholar Award	Fluids Engineering Division (FED)	Freeman Scholar Standing Committee
Gas Turbine Award	International Gas Turbine Institute (IGTI)	Gas Turbine Reading Committee
George Westinghouse Medals	Nuclear Engineering Division (NED) and Power Division (PD)	George Westinghouse Medals Committee
Gustus L. Larson Memorial Award	Pi Tau Sigma and Committee on Honors	Pi Tau Sigma Award Committee
H.R. Lissner Medal	Bioengineering Division (BED)	H.R. Lissner Medal Committee
Heat Transfer Memorial Award	Heat Transfer Division (HTD)	Heat Transfer Honors and Awards Committee
Henry Laurence Gantt Medal	Management Division (MD)	Henry Laurence Gantt Medal Board
Henry R. Worthington Medal	Petroleum Division	Henry R. Worthington Medal Committee
Internal Combustion Engine Award	Internal Combustion Engine Division (ICED)	Internal Combustion Engine Award Committee
J. P. Den Hartog Award	Design Engineering Division (DED)	J.P. Den Hartog Award Committee
J. Hall Taylor Medal	Council on Standards and Certification	J. Hall Taylor Medal Committee
James Harry Potter Gold Medal	Energy Conversion Group (ECG)	James Harry Potter Gold Medal Committee
James N. Landis Medal	Power and Nuclear Engineering Divisions (PD & NED)	James N. Landis Medal Committee
Johnson & Johnson Consumer Companies, Inc. Medal	Diversity & Inclusion Strategy Committee	Johnson & Johnson Consumer Companies, Inc. Medal Committee
Kate Gleason Award	Committee on Honors (COH)	Kate Gleason Award Committee
M. Eugene Merchant Manufacturing Research Medal	Manufacturing Engineering Division (MED)	M. Eugene Merchant Manufacturing Medal of ASME/SME Board of Award Committee
Machine Design Award	Design Engineering Division (DED)	Machine Design Award Committee
Marshall B. Peterson Award	Tribology Division (TRIB)	Tribology Division Honors and Awards Committee
Mayo D. Hersey Award	Tribology Division (TRIB)	Tribology Division Honors and Awards Committee

AWARD	TECHNICAL DIVISION OR OTHER SPONSOR	NAME OF COMMITTEE
McDonald Mentoring Award	Diversity & Inclusion Strategy Committee	McDonald Mentoring Award Committee
Melville Medal	General Awards Committee	General Awards Committee
Melvin R. Green Codes & Standards	Council on Standards & Certification	Melvin R. Green Codes & Standards Medal Committee
Milton C. Shaw Manufacturing Research Medal	Manufacturing Technology Division (MED)	Milton C. Shaw Manufacturing Medal Committee
Nadai Medal	Materials Division (MD)	Nadai Medal Committee
Nancy DeLoye Fitzroy and Roland V. Fitzroy Medal	Committee on Honors (COH)	Fitzroy Committee
Old Guard Early Career Award	Old Guard Committee	Old Guard Committee
Old Guard Prizes	Old Guard Committee	Old Guard Committee
Outstanding Student Section Advisor Award	General Awards Committee (GAC)	General Awards Committee
Patrick J. Higgins Award	Board on Standardization and Testing	Patrick J. Higgins Award Committee
Per Bruel Gold Medal for Noise Control and Acoustics	Noise Control and Acoustics Division	Per Bruel Gold Medal for Noise Control and Acoustics Committee
Performance Test Codes Medal	Board on Performance Test Codes	Performance Test Codes Medal Committee
Pi Tau Sigma Gold Medal	Pi Tau Sigma and Committee on Honors	Pi Tau Sigma Award Committee
Prime Movers Committee Award	Power Division	Prime Movers Award Committee
R. Tom Sawyer Award	International Gas Turbine Institute (IGTI)	R. Tom Sawyer Award Committee
Ralph Coats Roe Medal	Committee on Honors (COH)	Ralph Coats Roe Medal Committee
Richard J. Goldstein Energy Lecture Award	Heat Transfer Division, International Gas Turbine Institute, Energy Conversion and Storage Petroleum Division	Richard J. Goldstein Energy Lecture Award
Ruth and Joel Spira Outstanding Design Educator Award	Design Engineering Division (DED)	Ruth and Joel Spira Outstanding Design Educator Award Committee

AWARD	TECHNICAL DIVISION OR OTHER SPONSOR	NAME OF COMMITTEE
S.Y. Zamrik PVP Medal	Pressure Vessels and Piping Division (PVPD)	S.Y. Zamrik PVP Medal Committee
Safety Codes and Standards Medal	Board on Safety Codes and Standards	Safety Codes and Standards Medal Committee
Savio L-Y. Woo Translational Biomechanics Medal	Bioengineering Division (BED)	Savio L-Y Woo Medal Committee
Robert E. Koski Medal	Fluid Power Systems & Technology Divisions (FPST)	Robert E. Koski Medal Committee
Robert Henry Thurston Lecture Award	Basic Engineering Technical Group (BETG)	Robert Henry Thurston Lecture Award Committee
Robert M. Nerem Education and Mentorship Medal	Bioengineering Division (BED)	Robert M. Nerem Education and Mentorship Medal
Rufus Oldenburger Medal	Dynamic Systems and Control Division (DSCD)	Rufus Oldenburger Medal Committee
Sia Nemat-Nasser Early Career Award	Materials Division (MD)	Nemat-Nasser Early Career Award Committee
Soichiro Honda Medal	Internal Combustion Engine Division (ICED)	Soichiro Honda Medal Committee
Spirit of St. Louis Medal	Aerospace Division (AERO)	Spirit of St. Louis Medal Committee
Thomas A. Edison Patent Award	Design Engineering Division (DED)	Thomas A. Edison Patent Award Committee
Timoshenko Medal	Applied Mechanics Division (AMD)	Timoshenko Medal Committee
Van C. Mow Medal	Bioengineering Division (BED)	Van C. Mow Medal Committee

AWARD	TECHNICAL DIVISION OR OTHER SPONSOR	NAME OF COMMITTEE
Warner T. Koiter Medal	Applied Mechanics Division (AMD)	Warner T. Koiter Medal Committee
Wilfred C. LaRochelle Conformity Assessment Award	Board on Conformity Assessment	Wilfred C. LaRochelle Conformity Assessment Award Committee
William T. Ennor Manufacturing Technology Award	Manufacturing Engineering Division (MED)	William T. Ennor Manufacturing Technology Award Committee
Y.C. Fung Early Career Award	Bioengineering Division (BED)	Y.C. Fung Early Career Award Committee
Yeram S. Touloukian Award	Heat Transfer Division (HTD)	Yeram S. Touloukian Award Committee

ACHIEVEMENT AWARDS

ASME MEDAL

The ASME Medal, established in 1920, is the highest award that the Society can bestow and is to recognize "eminently distinguished engineering achievement." Only one ASME Medal may be awarded annually. Although some individuals have been honored by both the ASME Medal and Honorary Membership, each award has been made on the basis of different accomplishments.

ASME MEDALISTS

1921 Hjalmar G. Carlson 1983 Jack N. Binns, Sr. 1922 Frederick A. Halsey 1984 Aaron Cohen 1923 John R. Freeman 1985 Milton C. Shaw 1986 Orlan W. Boston 1926 R.A. Millikan 1927 Wilfred Lewis 1987 Philip G. Hodge, Jr. 1928 Julian Kennedy 1988 Eric Reissner 1930 W.L.R. Emmet 1989 William R. Sears 1990 Harley A. Wilhelm 1931 Albert Kingsbury 1933 Ambrose Swasey 1992 Daniel C. Drucker 1934 Willis H. Carrier 1993 Richard H. Gallagher 1996 Robert C. Dean, Jr. 1935 Charles T. Main 1997 Bernard Budiansky 1936 Edward Bausch 1937 Edward P. Bullard 1998 Frank Kreith 1938 Stephen J. Pigott 1999 H. Norman Abramson 2000 Arthur E. Bergles 1939 James E. Gleason 1940 Charles F. Kettering 2001 Warren M. Rohsenow 1941 Theodore von Karman 2002 Leroy S. "Skip" Fletcher 1942 Ervin G. Bailey 2003 Norman R. Augustine 2004 Bradford W. Parkinson 1943 Lewis K. Sillcox 1944 Edward G. Budd 2005 Robert E. Uhrig 1945 William F. Durand 2006 Richard Goldstein 1946 Morris E. Leeds 2007 Dean L. Kamen 1947 Paul W. Kiefer 2008 Frank E. Talke 1948 Frederick G. Keys 2009 Nam Pyo Suh 1949 Fred L. Dornbrook 2010 John Abele 1950 Harvey C. Knowles 2011 C. Dan Mote, Jr. 1951 Glenn B. Warren 2012 Jan D. Achenbach 1952 Nevin E. Funk 2013 Sia Nemat-Nasser 1953 Crosby Field 2014 Van C. Mow 1954 E. Burnley Powell 2015 James R. Rice 1955 Granville M. Read 2016 Junuthula N. Reddy 1956 Harry F. Vickers 2017 Zdeněk P. Bažant 1957 L.M.K. Boelter 2018 Thomas J.R. Hughes 1958 Wilbur H. Armacost 2019 Reginald I. Vachon 1959 Martin Frisch 1960 C. Richard Soderberg

1962 Philip Sporn 1963 Igor I. Sikorsky 1964 Alan Howard 1965 Johannes M. Burgers 1967 Mayo D. Hersey 1968 Samuel C. Collins 1969 Lloyd H. Donnell 1970 Robert Rowe Gilruth 1971 Horace Smart Beattie 1972 Waloddi Weibull 1973 Christopher C Kraft, Jr. 1974 Nicholas J. Hoff 1975 Maxime A. Faget 1976 Raymond D. Mindlin 1977 Robert W. Mann 1979 Jacob P. Den Hartog 1981 Robert S. Hahn

ADAPTIVE STRUCTURES AND MATERIAL SYSTEMS AWARD

The Adaptive Structures and Material Systems Award recognizes significant contributions to the sciences and technologies associated with adaptive structures and/or materials systems. The award is intended to honor a lifetime of achievement and sustained impact in the field and is given only to a senior researcher.

The winner is asked to give a plenary lecture at the annual ASME Smart Materials Adaptive Structures and Integrated Systems conference.

The Adaptive Structures and Material Systems Prize was established by the Aerospace Division as a division-level award in 1993 and was elevated to a Society-level award in 2014.

ADAPTIVE STRUCTURES AND MATERIAL SYSTEMS AWARD RECIPIENTS

2016 Ralph C. Smith 2017 Marcelo J. Dapino 2018 Diann Brei 2019 Nancy L. Johnson

ALLAN KRAUS THERMAL MANAGEMENT MEDAL

The Electronic and Photonic Packaging Division established the Allan Kraus Thermal Management Medal in 2007 to recognize individuals who have demonstrated outstanding achievements in thermal management of electronic systems and their commitment to the field of thermal science and engineering.

The nominee for the award should have significant contributions in thermal management of electronic systems demonstrated by successful product development, seminal papers, filed patents and/or leadership of research and development programs.

The award is named in honor of Allan Kraus, who is a Fellow of ASME and is being honored for his outstanding achievements and leadership in the field of thermal sciences as a researcher, a teacher, and a mentor to young thermal engineers; for his service to the heat transfer community, in general; and to the Electronic and Photonic Packaging Division of ASME, in particular.

ALLAN KRAUS THERMAL MANAGEMENT MEDALISTS

2009 Suresh V. Garimella 2010 Kenneth E. Goodson 2011 Robert E. Simons 2012 Louis C. Chow 2014 Peter E. Raad 2015 Martha Rencz 2016 Ravi Mahajan 2017 Masaru Ishizuka 2019 John R. Thome

BARNETT-UZGIRIS PRODUCT SAFETY DESIGN AWARD

The ASME Barnett-Uzgiris Product Safety Design Award recognizes individuals who have made significant contributions to the safe design of products through teaching, research, and professional accomplishments.

The award was established as the Triodyne Safety Award by the Design Engineering Division and operated as a division award until 2008, when it was elevated to a Society award and renamed the ASME Barnett-Uzgiris Product Safety Design Award.

BARNETT-UZGIRIS PRODUCT SAFETY DESIGN AWARD RECIPIENTS

2011 John B. Vorderbrueggen 2012 Henry Petroski 2013 Ren-Jye Yang 2014 Donald S. Bloswick 2015 John R. Puskar 2017 Saeed Barbat

BEN C. SPARKS MEDAL

The Ben C. Sparks Medal was established in 1990 for recognition of eminent service to mechanical engineering or engineering technology education through outstanding contributions that bring innovative, authentic, practice-based, engineering design/build experiences to undergraduate students. The award may be bestowed on an individual or collaborative team for excellence in curriculum implementation, teaching, academic/industry collaboration, or exemplary service to ASME student design-related programs.

Candidates must have a record of accomplishment over an extended period of time; play a major role in fostering new, innovative applications and approaches to the teaching of mechanical engineering and/or engineering technology; or effectively inspire promising systemic change that would enhance the readiness of graduates to begin engineering practice in industry.

Recipient(s) must hold or have held academic appointments in departments that have ABET-accredited (or substantially equivalent) degree programs or be an engineer(s) in industry, government, or private practice who has made an exemplary contribution to such degree programs.

The medal was established in memory of Ben C. Sparks, a devoted member of ASME and a dedicated teacher of mechanical engineering technology and mechanical engineering.

BEN C. SPARKS MEDALISTS

1991 Stanley M. Brodsky 1992 Elliot R. Eisenberg 1993 Donald R. Haworth 1994 John A. Weese 1997 Gary Robert Crossman 1998 Mulchand S. Rathod 1999 Philip E. Doepker 2000 Mark A. Pagano 2001 Kenneth J. Fisher 2002 Chittaranjan Sahay 2003 Mohammad A. Zahraee 2004 Frank A. Gourley 2005 George Sehi
2006 Alok K. Verma
2007 Charles J. Hurst
2009 Scott G. Danielson
2013 Robert O. Warrington, Jr.
Allan T. Kirkpatrick
Scott G. Danielson
Walter W. Laity
2014 Timothy W. Simpson
2015 Christopher A. Mattson
Carl D. Sorensen
2016 Allen H. Hoffman

2017 Steven W. Beyerlein 2018 David R. Wallace

BERGLES-ROHSENOW YOUNG INVESTIGATOR AWARD IN HEAT TRANSFER

The Bergles-Rohsenow Young Investigator Award in Heat Transfer is given to a young engineer who is under 36 years of age and has received a Ph.D. or an equivalent degree in engineering. The individual must be committed to pursuing research in heat transfer, and must have demonstrated the potential to make significant contributions to the field of heat transfer. Such contributions may take the form of, but are not limited to, analytical/numerical methods, equipment/instrumentation, or experimentation—any of which should lead to peer-reviewed publications.

Established by the Heat Transfer Division in 2003, the award was funded through the efforts of Arthur Bergles and Warren Rohsenow, both of whom are well known for their accomplishments in heat transfer research and for their mentoring of young researchers.

BERGLES-ROHSENOW YOUNG INVESTIGATOR AWARD IN HEAT TRANSFER RECIPIENTS

2004 Srinath V. Ekkad
2013 Kripa K. Varanasi
2005 Sylvie Lorente
2006 Wilson K.S. Chiu
2007 Andrei G. Fedorov
2008 Laurent Pilon
2009 William P. King
2010 Ronggui Yang
2011 Edmond J. Walsh
2013 Kripa K. Varanasi
2014 Jonathan A. Malen
2015 Baratunde Cola
2016 Patrick E. Hopkins
2017 Austin J. Minnich
2018 Asegun Henry
2019 Yongjie Hu

2012 Evelyn N. Wang

BERNARD F. LANGER NUCLEAR CODES AND STANDARDS AWARD

The Bernard F. Langer Nuclear Codes and Standards Award was established in 1977 in honor of B.F. Langer, who was instrumental in the development of the rules for nuclear vessels.

Award is in recognition of an individual(s) who has contributed to the nuclear power plant industry through the development and promotion of ASME Nuclear Codes and Standards or the ASME Nuclear Certification Program (check on line).

BERNARD F. LANGER NUCLEAR CODES AND STANDARDS AWARD RECIPIENTS

1978 William E. Cooper 1992 Marcus N. Bressler 1979 William R. Smith, Sr. 1993 Roger F. Reedy 1994 Owen F. Hedden 1980 Wendell P. Johnson 1995 William G. Knecht 1981 Lawrence J. Chockie 1996 Donald F. Landers 1982 Guy A. Arlotto 1997 John D. Stevenson Robert J. Bosnak 1998 Everett C. Rodabaugh Robert B. Minogue G. Wayne Reinmuth 1999 James A. Perry 2000 Sidney A. Bernsen 1983 Spencer H. Bush 2001 Charles J. Pieper 1984 Floyd N. Moschini 2002 Kenneth R. Balkey 1985 Howard F. Dobel 2003 Richard W. Barnes 1986 Edwin J. Hemzy 2004 Yasuhide Asada 1987 Robert L. Dick 2005 Richard E. Gimple 1988 Edward F. Gerwin 2006 Warren H. Bamford 1989 William H. Miller, Jr. 2007 Raymond R. Weidler 1990 Edward L. Williamson 2008 Christopher L. Hoffman 1991 T. Eugene Northup

2010 Ray P. Deubler 2011 Wilfred C. LaRochelle 2012 Richard D. Porco 2013 Bryan A. Erler 2014 Douglas Scarth 2015 Thomas J. Vogan 2016 Charles Bruny 2017 Kevin Ennis 2018 Ralph S. Hill III 2019 Richard W. Swayne

2009 Mary Drouin

BURT L. NEWKIRK AWARD

The Burt L. Newkirk Award is given to an individual who has not passed his or her 40th birthday on July 1 of the year in which the award is conferred and who is an ASME member at the time of nomination. It is given to an individual who has made notable contributions to the field of tribology in research or development as evidenced by important tribology publications.

Tribology for this award is defined as, "pertaining to the science and technology associated with surfaces in contact and relative motion with each other." It covers all the fundamentals associated with the field of friction, lubrication, and wear. It embraces all the technological aspects of bearings, brakes, clutches, gears, etc.

The award was named after Burt L. Newkirk, who made notable achievements in the theory and application of tribology during his industrial career and was an outstanding teacher following his retirement from industry.

BURT L. NEWKIRK AWARD RECIPIENTS

1997 Chiao-Ping Ku 1976 Francis E. Kennedy, Jr. 1977 Steve M. Rohde 1998 Timothy C. Ovaert 1978 Pradeep Gupta 1999 Rohit S. Paranjpe 1979 Thomas A. Dow 2000 Steven R. Schmid 1980 Stuart H. Lowenthal 2001 Andreas A. Polycarpou 1982 Dennis F. Li 2002 Thierry A. Blanchet 1983 Bharat Bhushan 2003 Sergio E. Diaz 1984 Hooshang Heshmat 2004 W. Gregory Sawyer 1986 Itzhak Green 2005 Michael R. Lovell 1987 Pawan K. Goenka 2006 Mitjan Kalin 1988 Kyriakos Komvopoulos 2007 Lior Kogut 1990 Michael M. Khonsari 2008 Michael Nosonovsky 1991 Farshid Sadeghi 2009 Robert W. Carpick 1992 Thomas N. Farris 2010 C. Fred Higgs III 1994 Srinivasan Chandrasekar 2011 Robert L. Jackson

2012 Ashlie Martini

1996 Christopher DellaCorte

2013 Tae Ho Kim 2014 Bart Raeymaekers 2015 David Burris 2016 Aaron Greco 2019 Alison C. Dunn

CHARLES RUSS RICHARDS MEMORIAL AWARD

The Charles Russ Richards Memorial Award is presented to the engineering graduate who has demonstrated overall outstanding achievement in mechanical engineering or related field 20 years or more following graduation with a baccalaureate degree from a regular engineering program of a recognized college or university. The candidate's achievements will be examined for an application of basic engineering methods or principles.

The award, established in 1944 by Pi Tau Sigma in coordination with ASME, honors Charles Russ Richards, founder of Pi Tau Sigma at the University of Illinois, former head of mechanical engineering and dean of engineering at the University of Illinois and later President of Lehigh University. He was a member of ASME and served on its Board of Governors.

CHARLES RUSS RICHARDS MEMORIAL AWARD RECIPIENTS

1947 Jacob P. Den Hartog 1981 Shien-Ming Wu 1949 Arthur M. Wahl 1982 Leroy S. Fletcher 1950 Burgess H. Jennings 1983 Peter A. Engel 1951 J. Kenneth Salisbury 1984 Ferdinand Freudenstein 1952 Jess H. Davis 1985 Ephraim M. Sparrow 1953 Thomas M. Lumly 1986 E. Kent Springer 1954 Robert H. Hughes 1987 Allen F. Rhodes 1955 Sylvan Cromer 1988 Ward O. Winer 1956 Everett M. Barber 1989 Ramesh K. Shah 1957 Wayne C. Edmister 1990 Ranga Komanduri 1958 Donald C. Burnham 1991 Frederick F. Ling 1959 M. Eugene Merchant 1992 John H. Staehlin 1960 Ascher H. Shapiro 1994 C. Dan Mote, Jr. 1961 Harrison A. Storm, Jr. 1995 Junuthula N. Reddy 1962 Dudley D. Fuller 1996 Tsu-Wei Chou 1963 George F. Carrier 1997 Masayoshi Tomizuka 1964 Simon Ostrach 1998 Hong Thomas Hahn 1965 Leonard J. Koch 1999 Ephraim Suhir 1966 J. Lowen Shearer 2000 Bharat Bhushan 1967 T. Cyril Noon 2001 Adrian Bejan 1968 Bernard W. Shaffer 2002 Salvatore Torquato 1969 Robert E. Uhrig 2003 Roop L. Mahajan 1970 Ralph G. Nevins 2005 Warren R. DeVries 1971 Howard L. Harrison 2006 Ramesh K. Agarwal 2007 Richard O. Buckius 1972 Charles E. Jones 2008 Guruswami Ravichandran 1973 Ali A. Seireg 1974 Richard J. Grosh 2009 E. Daniel Hirleman, Jr. 2010 Yonggang Huang 1975 Carl F. Zorowski 1976 Ali S. Argon 2011 Huajian Gao 1977 Hassan A. Hassan 2012 Pol D. Spanos 1978 John C. Chato 2013 A. Galip Ulsoy 1979 John H. Lienhard 2014 Suresh V. Garimella 1980 Albert I. King 2015 Xiang Zhang

2016 Kenneth E. Goodson 2017 Jian Cao 2018 Kon-Well Wang 2019 Pradeep Sharma

CHARLES T. MAIN STUDENT LEADERSHIP AWARD

The Charles T. Main Award was established in 1919 in honor of the 37th President of ASME. In 1971, it was combined with the Arthur L. Williston Medal contest to encourage Student Members and young engineers to become active in public service. In 1983, the award was expanded to include a Second Place award. The award was renamed the Charles T. Main Student Leadership Award in 2014.

A new format for the Charles T. Main Award recognizes at the Society-wide level Student Members whose leadership and service qualities have contributed, for a period of more than one year, to the program and operation of a Student Section of the Society. First place is bestowed upon the student who best meets the award criteria, while second place is awarded to the student who is next best in meeting these criteria. Up to eight honorable mentions will be presented to qualified candidates.

CHARLES T. MAIN AWARD STUDENT LEADERSHIP AWARD RECIPIENTS – FIRST PLACE

1925 Clement R. Brown 1926 W.C. Taylor 1928 Robert M. Mever 1930 Jules Podnosoff 1931 Robert E. Klise 1932 Marshall Anderson 1933 George D. Wilkinson, Jr. 1934 Philip P. Self 1935 G. Lowell Williams 1937 Allan P. Stern 1938 Edward W. Connelly 1939 James H. Bright 1940 Frank de Pould 1941 John J. Balun 1942 Bernard J. Isabella 1943 Mitchell C. Kazen 1944 Fred M. Piaskowski 1945 Jack Drandell 1946 Victor S. Rykwalder 1947 Alvaro R. Boera 1948 Earle Duane Stewart 1949 Stanley M. Kuvacheff 1950 Richard T. Johnson 1952 Israel E. Rubin

1953 Peter Ashurkoff 1954 John B. Pendergrass, Jr. 1955 Richard J. Slember

1956 Marion J. Balcerzak 1957 Joseph P. Hunter 1958 Frank D. Sams 1959 James L. Benson 1960 John W. McDaniel 1961 Lester W. Wurm 1962 David W. Wieting

1963 Robert Lafayette Ash 1967 Muzzamil Niazi 1968 Terry Dean Schmidt 1970 Steve H. Woodard 1971 James M. Singleton 1972 Harold Chapin Lowe 1973 Gary Patrick Pezall 1974 Adrian P. Villa 1976 Scott Elliot Baker 1977 Charles S. Tamarin 1978 Emily Earle 1979 Richard A. Ferraro

1980 Russell S. Colvin 1981 Scott H. Bueher

1982 Brenda B. Elarbee 1983 Stephen A. Hight 1984 Linda Marie Hubbard 1985 Anne Bazan 1986 Mark A. Meili 1987 Keith G. Benedict 1988 Kelli L. Kowaleski 1989 Kirk W. Olsen 1990 Darleen Centala

1991 Mark D. Conner

1992 Maria D. Guerra

Catholic University of America Johns Hopkins University Newark College of Engineering Polytechnic Institute of Brooklyn University of Michigan University of Michigan Newark College of Engineering Colorado State College Lafayette College Case School of Applied Science University of Detroit Lehigh University Case School of Applied Science University of Detroit Case School of Applied Science University of Detroit University of Detroit Southern Methodist University University of Detroit Stevens Institute of Technology University of Pittsburgh University of Detroit University of Detroit Cooper Union School of Engineering Princeton University Carnegie Institute of Technology Cooper Union School of Engineering University of Detroit

University of Detroit Clemson Agricultural College University of Vermont Rice Institute

Kansas State University Lamar State College of

Technology

Kansas State University Wichita State University University of Washington Arizona State University University of Alabama University of Kansas

University of Wisconsin, Madison Clarkson College of Technology

Purdue University Columbia University Auburn University

State University of New York at Buffalo

Louisiana Technical University Virginia Polytech Institute and

State University

University of South Florida Worcester Polytechnic Institute University of Rochester Western New England College Kansas State University University of Southern Indiana University of New Hampshire University of Akron California State University, Long

Beach

University of Alabama, Birmingham

The City College, CUNY

1993 Carol J. Bates 1994 Robert R. Vallance 1995 John C. Schiffer 1996 Joseph G. McElhaney 1997 Fionna K. Murray 1998 Peter J. Umbdenstock 1999 Angela Carr

2000 Michele A. Monnier 2001 Andrea C. Hoth 2002 Amip Shah 2003 Jill C. Anderson 2004 Stephen J. Klick 2005 Mandy Brogdon 2006 Adeodato I. Botello-Arrendondo

2007 Daniel Joseph Hanna 2008 Vince D. Romanin 2009 Brianne M. Wilburne 2010 Nathaniel Dale Taylor 2011 Danielle Jacobson 2012 Caitlin A. Correll 2013 Leila C. Aboharb 2014 Meredith A. Campbell 2015 Jonathan D. Jennings 2016 Hind Hajjar 2017 Gemma Iruegas 2018 Brandon Graham 2019 Sandy Karam

Purdue University Virginia Polytechnic Institute University of Akron Virginia Polytechnic Institute Virginia Polytechnic Institute Mississippi State University Virginia Polytechnic Institute and State University University of Dayton Valparaiso University Rowan University **Boston University** Boise State University University of Dayton University De Guanajuato

Drexel University University of Dayton The Pennsylvania State University Drexel University Drexel University Cooper Union Drexel University Daniel Webster College University of Missouri American University of Beirut Universidad Panamericana Rowan University Notre Dame University - Louaize

CHARLES T. MAIN AWARD RECIPIENTS - SECOND PLACE

1984 Douglas L. WahlOregon Institute of Technology1985 Scott E. Cooper, Jr.University of NC at Charlotte1986 Andre L. BoehmanUniversity of Dayton1987 Mark V. MartinUniversity of Oklahoma

1988 Robert R. Hardman University of Alabama, Birmingham Louisiana Technical University 1989 Tina A. Williams University of South Florida 1990 Anne Marie East 1991 Richard L. Case University of Nebraska, Lincoln 1992 Sara L. Farrar Colorado State University Brigham Young University 1993 Kathryn D. Jorgensen 1994 Connie J. Bleidorn University of Dayton Daniel J. Engert Colorado State University University of Illinois-Champaign 1995 Priya Rangaswamy

1996 Wade D. Vinson University of Houston 1997 Lindy Hou The City College - CUNY

M. Christine Roberts Utah State University
1998 Angela Carr Virginia Polytechnic Institute

1999 Michelle M. Hurler
2000 Chad W. Jansen
2001 Faye M. Tomimbang
2002 Stephani Ferrufino
2003 Laura E. Basehore

Syracuse University
University of Wisconsin-Madison
Florida Institute of Technology
Virginia Polytechnic Institute
Virginia Polytechnic Institute

2004 Aaron J. Ryan Pella Corporation

2005 Justin M. Crapps Mississippi State University

2006 Amanda M. Thomas Virginia Tech 2007 Danielle Williams Virginia Tech

2008 Jesse Aaron HuguetUniversity of Alabama2009 Eduardo Jose BarrientosUniversidad Simon Bolivar2010 Bianca L. CovingtonUniversity of Alabama2011 Kenneth W. SchnautzUniversity of Southern Indiana

2012 Hardik Tiwari Birla Institute of Technology and

Science

2013 Sarah E. Johnson
2014 Claire C. Harper
2015 Caleb Amy
2016 Eduardo Guevara
University of Alabama
Georgia Institute of Technology
National and Autonomous
University of Mexico

2017 Jithu Paulose Federal Institute of Science and

Technology

2018 Joseph Pechstein Milwaukee School of Engineering 2019 Abhijith J. Kumar Federal Institute of Science and

Technology

DANIEL C. DRUCKER MEDAL

The Daniel C. Drucker Medal was established in 1997 and is conferred in recognition of distinguished contributions to the field of applied mechanics and mechanical engineering through research, teaching, and service to the community over a substantial period of time.

Instituted by the Applied Mechanics Division, the medal honors Dr. Daniel Drucker and commemorates his service to the profession.

DANIEL C. DRUCKER MEDALISTS

1998 Daniel C. Drucker 1999 Ascher H. Shapiro 2000 Philip G. Hodge, Jr. 2001 Bruno A. Boley 2002 George J. Dvorak 2003 Leon M. Keer 2004 Frank A. McClintock 2005 Robert L. Taylor 2006 Alan Needleman 2007 Albert S. Kobayashi 2008 Thomas C. T. Ting 2009 James R. Barber 2010 Rohan C. Abeyaratne 2011 John W. Rudnicki 2012 James W. Dally

2013 Yonggang Huang 2014 Lallit Anand 2015 K. Ravi-Chandar

2016 Kyung-Suk Kim 2017 David M. Parks 2018 David M. Barnett 2019 John L. Bassani

DIXY LEE RAY AWARD

The Dixy Lee Ray Award, established in 1998, recognizes significant achievements and contributions in the broad field of environmental protection. As a general rule, in alternate years achievement in the following areas will be recognized: environmental engineering, including environmental technology and related topics; and other environmental areas, including environmental health, environmental sciences, environmental management and policy, and related topics.

The award was established in honor of Dixy Lee Ray's advocacy to the development of those technologies that serve humanity. She believed that the engineering profession was uniquely qualified to develop and implement environmentally acceptable technologies.

DIXY LEE RAY AWARD RECIPIENTS

1999 Clyde W. Frank 2000 Seymour K. Padnos 2001 John F. Elter 2002 Mohammad A. Al-Sarawi

2003 Ines R. Triay

2004 Pedro A. Gelabert

2005 Goetz K. Oertel

2006 Richard Pombo

2007 Richard Wilson

2008 Peter Maggiore 2009 Robert G. Watts

2011 Thad W. Allen

2012 Goshi Hosono 2013 Aníbal L. Taboas

2014 Leo P. Duffy

2015 Kaufui Vincent Wong

2016 Jerald L. Schnoor 2018 C. Andrew Miller

EDWIN F. CHURCH MEDAL

In 1972, the Society established the Edwin F. Church Medal to be awarded annually, if warranted, to the individual who has rendered eminent service in increasing the value, importance, and attractiveness of mechanical engineering education through any appropriate mechanism, including universities, technical institutes, professional society educational activities, continuing education programs of professional societies and private groups, in-house professional development programs of industrial concerns and governmental agencies, programmed learning, and self-instruction systems.

Nominees may or may not be professional educators. However, the award is not intended to recognize professional educators on that merit alone.

The "eminent service" to be considered for the award as performed by the professional educator must be above and beyond the nominee's normal activities performed as part of the duties of a professional educator.

Excellence in teaching, research, administration, and publications by professional engineering educators is not pertinent, unless that activity is outside the usual scope of the nominee's organization or institution.

The Edwin F. Church Medal may be made to one recipient of any age who need not be a member of ASME. It is administered by the General Awards Committee, which secures nominations and makes recommendations to the Committee on Honors, who selects the recipient.

The Edwin F. Church Medal was established from a bequest of Edwin F. Church, Jr. (1879-1964), loyal member of ASME, devoted supporter of ASME student activities, dedicated teacher and, for 32 years, professor of mechanical engineering and head of the department at the Polytechnic Institute of Brooklyn.

EDWIN F. CHURCH MEDALISTS

1973 Wilber R. Leopold

1974 Hobart A. Weaver

1975 Harry Conn

1976 Frank W. Von Flue

1979 Kenneth A. Roe

1980 Dennis K. Bushnell

1981 Neal P. Jeffries

1982 Clinton H. Britt

1984 Milo Price

1985 Emil L. Martinec

1987 Garland H. Duncan

1988 Dale E. Klein

1989 Adolph T. Molin

1990 James R. Welty

1991 Joseph A. Falcon

1992 Stephen Juhasz 1993 Larry C. Oven

1994 Avram Bar-Cohen

1997 Dean Kamen

1998 Allan K. Kraus

1999 Woodie C. Flowers

2000 John H. Lienhard

2001 Frank Kreith

2002 William S. Hammack

2003 Devendra Garg

2004 David Lavery

2005 Vincent Wilczynski

2009 Wilber J. Marner

2011 Ramesh K. Agarwal

2012 Kenneth S. Ball

2013 William M. Worek

2014 John W. Cipolla

2015 William J. Wepfer

2016 Karen A. Thole

2017 Francis A. Kulacki

2018 Kendra V. Sharp

2019 Andreas Polycarpou

FLUIDS ENGINEERING AWARD

The Fluids Engineering Award is bestowed for outstanding contributions, over a period of years, to the engineering profession and especially to the field of fluids engineering through research, practice, and/or teaching.

The award was established by the Fluids Engineering Division in 1968 and operated as a division award until 1978, when it was elevated to a Society award.

FLUIDS ENGINEERING AWARD RECIPIENTS

1979 Robert C. Dean, Jr. 2009 Ronald J. Adrian 1981 Ascher H. Shapiro 2011 John F. Foss 1983 George Rudinger 2012 Gretar Tryggvason 1984 Hans W. Liepmann 2013 Ephraim J. Gutmark 1985 Apollo M.O. Smith 2014 Efstathios S. Michaelides 1986 Milton S. Plesset 2015 Promode R. Bandyopadhyay 1987 Mark V. Morkovin 2016 Patrick J. Roache 1988 Allan J. Acosta 2017 Michael W. Plesniak 1989 William C. Reynolds 2018 Upendra S. Rohatgi 2019 Nadine Aubry 1990 Turgut Sarpkaya 1991 Frank M. White

2000 Fazle Hussain 2001 Ramesh K. Agarwal 2002 Paul Cooper

1992 Christopher E. Brennen 1993 Roger E.A. Arndt 1994 Graham B. Wallis 1995 Clayton T. Crowe 1996 Budugur Laskhminarayana 1997 Virendra C. Patel 1998 Michael Roco 1999 Michael P. Paidoussis

2003 Marvin E. Goldstein 2004 Joseph Katz

2005 Andrea Prosperitti 2006 Wolfgang A. Rodi

2007 Alexander J. Smits

2008 Ching-Jen Chen

FRANK KREITH ENERGY AWARD

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

The Award was established by the Solar Energy and Advanced Energy Systems Divisions to honor Dr. Frank Kreith's contributions to the field of heat transfer and solar energy.

FRANK KREITH ENERGY AWARD RECIPIENTS

2006 Roland Winston 2007 D. Yogi Goswami

2008 Ari Rabl 2009 Robert H. Socolow

2010 Byard D. Wood

2010 Byard D. Wood 2011 Ann Marie Sastry

2012 Jane H. Davidson

2013 James E. Smith

2015 Michael Webber

2016 Aldo Steinfeld

2017 Gershon Grossman

2018 William M. Worek

2019 Gang Chen

GEORGE WESTINGHOUSE MEDALS

The George Westinghouse Medals are bestowed for eminent achievement or distinguished service in the power field of mechanical engineering. The Silver Medal is bestowed upon one who is not yet 45 years of age on June 30 of the year in which the medal is awarded. Considering power in the broad sense, the basis of the awards shall include contributions of utilization, application, design, development, research, and the organization of such activities in the power field.

Candidates are not restricted by profession nor by membership in any engineering society or organization.

To perpetuate the value of the rich contribution to power development made by George Westinghouse, Honorary Member and 29th President of the Society, the Westinghouse Educational Foundation established the Gold Medal in 1952 and the Silver Medal in 1971.

GEORGE WESTINGHOUSE GOLD MEDALISTS

1953 Alexander G. Christie 1981 Earle C. Miller 1954 Walker L. Cisler 1982 William T. Reid 1955 Hyman G. Rickover 1983 Eugene P. Wilkinson 1984 1956 Perry W. Pratt Joseph R. Szydlowski 1957 Alfred Iddles 1985 Eugene A. Saltarelli 1958 Frederick P. Fairchild 1986 Richard J. Coar 1960 Ernest C. Gaston 1987 Henry O. Pohl 1961 Gerald V. Williamson 1988 Warren A. Rhoades, Jr. 1962 Edwin H. Kreig 1989 J. Ed Smith 1963 Abbott L. Penniman, Jr. 1990 John J. Taylor 1964 Frederick W. Argue 1991 Ralph J. Ortolano 1965 Robert A. Bowman 1992 Daniel R. Wilkins 1966 Robert C. Allen 1993 Frederick W. Buckman 1967 Robert A. Baker, Sr. 1995 Thomas H. McCloskey 1998 Ashwani K. Gupta 1968 Roland A. Budenholzer 1969 Ralph C. Roe 1999 Atambir S. Rao 1970 Charles A. Meyer 2000 David G. Lilley Robert C. Spencer, Jr. 2001 János M. Beér 1971 Wilfred McGregor Hall 2002 Arthur H. Lefebyre 1972 William S. Lee 2003 Yassin A. Hassan 1973 Bernard F. Langer 2004 Adel F. Sarofim 1974 Charles W. Elston 2005 Subramanyam R. Gollahalli

2010 Wlodzimierz Blasiak 2011 Nicholas Syred 2012 Richard R. Schultz 2013 Yiannis A. Levendis 2014 Ryoichi S. Amano 2015 Karen A. Thole 2016 Kenneth Bray 2017 Alan Williams 2018 Timothy C. Lieuwen 2019 Hameed Metghalchi

GEORGE WESTINGHOUSE SILVER MEDALISTS

1972 William E. Rice 1973 Michael A. Ambrose 1974 Shelby L. Owens 1976 Richard V. Shanklin, III 1977 James C. Corman 1978 Romano Salvatori 1979 Edward W. Stenby 1980 Robert L. Gamble 1981 Ronald Pigott 1982 Leslie D. Kramer 1983 Remco P. Waszink 1984 William J. Bryan 1986 Joseph A. Barsin 1987 Albert D. LaRue 1989 Scott A. Patulski

1990 Atambir S. Rao

1976 John W. Simpson

1979 William R. Gould

1978 Peter Fortescue

1980 Fred J. Moody

1991 John B. Kitto, Jr.
1993 Stephen R. Reid
1995 V.K. "Bindi" Chexal
1998 Ting Wang
2001 Susumu Mochida
2003 Jason E. Jenkins
2005 Andrzej Szlek
2009 Somrat Kerdsuwan
2010 Timothy C. Lieuwen
2011 Margaret S. Wooldridge
2012 Weihong Yang
2015 Angela Violi
2016 Elia Merzari
2017 Frédéric Villeneuve

2006 Ben T. Zinn

2007 Roman Weber

2008 Edwin A. Harvego

2009 Essam E. Khalil

GUSTUS L. LARSON MEMORIAL AWARD

The Gustus L. Larson Memorial Award is presented to the engineering graduate who has demonstrated overall outstanding achievement in mechanical engineering or related field within 10 to 20 years following graduation with a baccalaureate degree from a regular engineering program of a recognized college or university. The candidate's achievements will be examined for an application of basic engineering methods or principles.

The award, established in 1974, honors Gustus L. Larson, ASME Fellow and founder of Pi Tau Sigma at the University of Wisconsin. He was a recognized leader in heating, ventilating, and air conditioning and was a former president of the ASHVE.

GUSTUS L. LARSON MEMORIAL AWARD RECIPIENTS

1975 Chang-Lin Tien 1995 Wing Kam Liu 1996 David N. Ku 1976 John G. Bollinger 1977 Nam P. Suh 1997 Suhada Jayasuriya 1978 Philip H. Francis 1998 Jamal Seyed-Yagoobi 1979 Gerald R. Seemann 1999 James F. Oliver 2000 Cristina H. Amon 1980 Arthur G. Erdman 1981 Terry E. Shoup 2001 Arunava Majumdar 1982 Melvyn C. Branch 2002 Thomas R. Kurfess 1983 R. Byron Pipes 2003 Yonggang Huang 1984 Robert A. Altenkirch 2004 Suresh V. Garimella 1985 Klaus-Jurgen Bathe 2005 Robert Parker 1986 Bharat Bhushan 2006 Narayana R. V. Aluru 1987 David L. Butler 2008 Andrew G. Alleyne 1988 Adrian Beian 2009 Anna G. Stefanopoulou 1989 Boris Rubinsky 2010 Andrei G. Fedorov 1990 Dale E. Klein 2011 Arvind Raman 1991 Pol D. Spanos 2012 Nicolas Hadiiconstantinou 1992 George P. Peterson 2013 William P. King

2014 Wei Lu

2015 Nikhil Ashokrwin Koratkar

1993 Bahram Ravani

1994 Salvatore Torquato

2016 Kenneth T. Christensen 2017 Evelyn N. Wang 2018 Kripa K. Varanasi 2019 Yong Zhu

H.R. LISSNER MEDAL

The H.R. Lissner Award is presented for outstanding accomplishments in the area of bioengineering in the form of significant research contributions; development of new methods of measuring; design of new equipment and instrumentation; educational impact in the training of bioengineers; or service to the bioengineering community and/or the ASME Bioengineering Division. The award was established by the Bioengineering Division in 1977 and operated as a division award until 1987, when it was elevated to a Society-level Award.

H.R. LISSNER MEDALISTS

1987 Van C. Mow 2002 Kenneth R. Diller 2003 Vijay K. Goel 1988 Alf L. Nachemson 2004 John M. Tarbell 1989 Robert M. Nerem 2005 Steven A. Goldstein 1990 Albert B. Schultz 1991 Savio L.Y. Woo 2006 Peter A. Torzilli 2007 Maury Lane Hull 1992 John C. Chato 1993 Don P. Giddens 2008 Noshir A. Langrana 2009 Thomas P. Andriacchi 1994 Sheldon Weinbaum 1995 Robert E. Mates 2010 Roger D. Kamm 1996 Albert I. King 2011 Jay D. Humphrey 2012 David L. Butler 1997 Ajit P. Yoganathan 1998 Malcolm H. Pope 2013 Mehmet Toner 1999 Stephen C. Cowin 2014 Kyriacos A. Athanasiou 2000 Morton H. Friedman 2015 James A. Ashton-Miller 2001 W. Michael Lai 2016 Roger C. Haut

2017 Gerard A. Ateshian 2018 Louis J. Soslowsky 2019 Jennifer S. Wayne

HEAT TRANSFER MEMORIAL AWARD

The Heat Transfer Memorial Award is bestowed on individuals who have made outstanding contributions to the field of heat transfer through teaching, research, design, or publications.

Each award is based on achievement through publications in an area of heat transfer or through the application of science or art of heat transfer. One award may be made annually in each of the three following categories: the science of heat transfer, the art of heat transfer, or the general subject of heat transfer. Recipients are not restricted by nationality, age, or society membership.

The award was established by the Heat Transfer Division in 1959 and operated as a Divisional award until 1974, when it was elevated to a Society-level award.

HEAT TRANSFER MEMORIAL AWARD RECIPIENTS

1975 Peter Griffith Simon Ostrach1976 Warren H. Giedt Raymond Viskanta1977 Robert D. Cess

Rolf H. Sabersky 1978 Richard J. Goldstein John A. Clark

1979 Arthur E. Bergles Yih-Yun Hsu

1980 John H. Lienhard

1981 Ared Cezairliyan Kwang-Tzu Yang Ivan Catton

1982 Yasuo Mori

1983 Roger Eichhorm

1984 Wei-Jei Yank

1985 Ralph Greif Virgil E. Schrock

1986 Richard C. Chu Arcot Ramachandran

1987 Ralph L. Webb M. Necati Ozisik

1988 Gerard M. Faeth Frank P. Incropera

1989 Bora B. Mikic Tom J. Love, Jr.

Robert J. Moffat

1990 Alfred L. Crosbie Michael M. Chen Michael G. Dunn

1991 John R. Howell Kenneth L. Johnson Suhas V. Patankar

1992 Vijay K. Dhir Thomas F. Irvine, Jr. Wataru Nakayama

1993 Vedat S. Arpaci W. J. Minkowycz

W. J. Minkowycz 1994 Kenneth R. Diller Adrian Bejan

1995 John R. Lloyd Yogesh Jaluria

1996 Boris Rubinsky Ping Cheng Leroy S. Fletcher

1997 Chung K. Law Sadik Kakac 1998 Amir Faghri

James V. Beck

1999 Sanjoy Banjerjee Soung M. Cho

Avram Bar-Cohen 2000 Ta-Shen Chen

Ramesh K. Shah Ashley F. Emery

2001 Portonovo S. Ayyaswamy George P. Peterson

2002 Massoud Kaviany Je-Chin Han

Roop L. Mahajan 2003 Dimos Poulikakos

M. Michael Yovanovich James R. Welty

2004 Mohammad Faghri

Yildiz Bayazitoglu 2005 Abdolhossein Haji-Sheikh

Michael Modest Wei Shyy

2006 Arun Majumdar C. Thomas Avedisian Kambiz Vafai

2007 Donald M. McEligot Costas Grigoropolous

Van P. Carey 2008 Lawrence A. Kennedy Leon R. Glicksman

Gang Chen 2009 Cristina H. Amon

009 Cristina H. Amon Jong H. Kim

Richard H. Pletcher 2010 Suresh V. Garimella

John R. Thome

Mamoru Ishii

2011 Bengt A. Sunden

Sumanta Acharya 2012 Chang H. Oh

2012 Chang H. Oh Satish G. Kandlikar Javad T. Mostaghimi

2013 Aldo Steinfeld Yogendra Joshi Issam Mudawar

2014 Jacob Nan-Chu Chung Xianfan Xu

Kenneth E. Goodson

2015 John H. Lienhard V

Francis A. Kulacki

Zhuomin Zhang

2016 Raj M. Manglik Jayathi Y. Murthy Brent W. Webb

2017 Zahid H. Ayub Christoph Beckermann

Christoph Beckermann Mohammed El-Genk

2018 Li Shi

M. Pinar Mengüç Timothy S. Fisher

2019 Dereje Agonafer

James Klausner Satwindar S. Sadhal

HENRY LAURENCE GANTT MEDAL

The Henry Laurence Gantt Medal, established in 1929 and elevated to a Society-level award in 1999, is given for distinguished achievement in management and for service to the community.

The medal was established in honor of Henry Laurence Gantt, a prolific writer and one of the first leaders in the scientific management movement to express concern for the human element of productivity.

His enduring legacy is the philosophy that seeks to turn the potential of industry into a broad contribution of service to society. He believed that managers should "view their activities from the vantage point of the larger communities business serves, thus dedicating themselves to the doctrine of service."

HENRY LAURENCE GANTT MEDALISTS

2000 Paul Soros 2001 Roy M. Huffington 2002 Alexander W. Dreyfoos 2003 William R. Timken, Jr. 2004 Julie Spicer England 2005 Kathleen M. Bader 2006 Charla K. Wise 2018 Todd R. Allen 2019 Margaret G. McCullough

HENRY R. WORTHINGTON MEDAL

The Henry R. Worthington Medal is bestowed for eminent achievement in the field of pumping machinery. Examples of such achievement may be in the areas of research, development, design, innovation, management, education, or literature. The award was established by Worthington Pump, Inc., in 1980.

HENRY R. WORTHINGTON MEDALISTS

1980 Igor J. Karassik

1981 Warren G. Whippen

1982 Allan J. Acosta

1983 Calvin A. Gongwer

1984 Harold H. Anderson

1985 Samuel L. Collier

1986 Warren H. Fraser

1987 John E. Miller

1988 Raymond B. Furst

1989 Kenneth L. Treiber

1990 Irving Taylor

1991 Dara W. Childs

1992 Elemer Makay

1993 Paul Cooper

1994 Edward Grist

1995 William E. Nelson

1996 Richard F. Salant

1997 Thomas J. Fritsch

1999 Frank Weis

2000 Peter Hergt

2003 Stuart L. Scott

2009 Manfred Rautenberg

2010 David Japikse

2011 Donald P. Sloteman

2012 Abraham Engeda

2013 Steven M. Tipton

2014 Gerald L. Morrison

2015 Jinkook Lee

2016 Bruno Schiavello

2017 Yu-Tai Lee

2018 Jaikrishnan R. Kadambi

2019 Akira Goto

HOLLEY MEDAL

The Holley Medal is bestowed only on an individual who, by some great and unique act(s) of an engineering nature, has accomplished a great and timely public benefit. In judging the merits of any candidate for this award, no limitations shall arise out of the nominee's formal degree of education, membership in any society or organization, or the circumstances of employment or official position.

Attention shall be concentrated on the brilliance of the art—not on the individual.

The achievement should be of such public importance as to be worthy of the gratitude of the nation and to call forth the admiration of engineers.

In 1973, eligibility for this award was amended to recognize more than one individual for a single achievement, provided that each individual made an equal or comparable contribution.

The medal was established in 1924 to honor Alexander L. Holley, Charter Member of the Society, by George I. Rockwood, Honorary Member and Vice President of ASME from 1924 to 1925.

HOLLEY MEDALISTS

1924 Hjalmar G. Carlson 1928 Elmer A. Sperry 1930 Baron C. Shiba 1934 Irving Langmuir Germeshausen 1936 Henry Ford

1937 Frederick G. Cottrell 1938 Francis Hodgkinson

1939 Carl E. Johansson

1940 Edwin H. Armstrong 1941 John C. Garand

1942 Ernest O. Lawrence 1943 Vannevar Bush

1944 Carl L. Norden 1945 Sanford A. Moss

1946 Norman Gibson

1947 Raymond D. Johnson

1948 Edwin H. Land

1950 Charles G. Curtis

1951 George R. Fink

1952 Sanford L. Cluett

1953 Philip M. McKenna

1954 Walter A. Shewhart

1955 George J. Hood

1957 Charles S. Draper

1959 Col. Maurice J. Fletcher

1961 Thomas Elmer Moon

1963 William Schockley

1968 Chester F. Carlson

1969 Willis J. Whitfield 1973 Harold E. Edgerton

Kenneth J. Germeshausen

1975 George M. Grover

1976 Emmet N. Leith

Juris Upatnieks

1977 J. David Margerum

1979 Bruce G. Collipp

Douwe De Vries

1980 Soichiro Honda

1982 Jack St. Clair Kilby

1985 John V. Atanasoff 1986 Wilson Greatbatch

1987 Robert J. Moffat

1988 Vernon D. Roosa

1989 Jack S. Kilby

Jerry D. Merryman

James H. Van Tassel

1990 Roy J. Plunkett

1991 James R. Thompson, Jr.

1994 Dominick Danna

Richard W. Newman

William C. Moore 1996 Bernard J. Miller

1998 Donna L.Shirley

2001 Heinz Erzberger

2005 James D. Walker

2008 David +G. Lilley

2010 Ashwani K. Gupta

HONORARY MEMBER

An Honorary Member shall be a person who has made "distinctive contributions" to engineering, science, industry, research, public service, or other pursuits allied with and beneficial to the engineering profession.

Honorary Membership was first awarded in 1880, the founding year of the Society. The roster of Honorary Members contains the names of leaders of world renown who have been selected under carefully drawn procedures rigorously maintained by the Society over the years.

In 1962, the ASME further defined this statement as "distinguished service that contributes significantly to the goals of the engineering profession." While this definition may sometimes imply career-long dedicated activity, that alone is not adequate for this highest level of Society membership.

The Board of Governors may elect up to five Honorary Members each year (By-Law B3.1.10). An Exception was made in 1980—the Centennial Year of the Society—when thirty-eight Honorary Members were elected.

HONORARY MEMBERS (LIVING)

1977 Ivar Giaever 1979 H. Norman Abramson 1980 Jimmy Carter Robert M. Drake, Jr. Jost M. Haenny Yu-Tung Hu Alexander L. London Frithiof I. Niordson Jacques Peters Kenneth Preiss 1981 James L. Everett 1985 Ronald L. Geer Theodore H.H. Pian 1986 Bernard Crossland 1989 Hans W. Liepmann 1990 George Herrmann 1991 George N. Sandor 1992 Richard M. Christensen Richard J. Goldstein Bernard L. Koff 1993 Joseph M. Juran 1995 Thomas R. Kane Paul Leung John H. Lienhard 1996 Yuan-Cheng B. Fung Ascher H. Shapiro 1997 L. S. "Skip" Fletcher Salomon Levy C. Dan Mote, Jr.

Reginald I. Vachon

Michael M. Carroll

Henry McDonald

1998 Genichi Taguchi

1999 W. Wayne Allen

John Dundurs

2001 Earnest L. Daman

2002 Jan D. Achenbach

Bei Tse Chao

Amos E. Holt 2003 Richard Rosenberg Karl J. Springer John A. Swanson 2004 Ray M. Bowen J. Tinsley Oden 2005 Sia Nemat-Nasser 2006 Alva L. Addy James R. Welty Ward O. Winer Charles O. Velzy John H. Sununu 2007 Avran Bar-Cohen Bobby L. Green 2008 Nancy D. Fitzroy 2009 David L. Belden Winfred M. Phillips William A. Weiblen 2010 William J. "Bill" Adams Harry Armen Keith B. Thayer David N. Wormley Sam Y. Zamrik Paul J. Torpey 2011 Adrian Bejan Nathan H. Hurt Junuthula N. Reddy 2012 Yildiz Bayazitoglu Zděnek P. Bažant Vijay K. Dhir Yogesh Jaluria 2013 Ted Belytschko John R. Howell Said Jahanmir Sadik Kakaç Arunava Majumdar 2014 Warren R. DeVries Robert E. Nickell Pol D. Spanos 2015 Romesh Batra

Webb Marner

Terry E. Shoup

2016 Cristina H. Amon
Ashwani Gupta
Shiv G. Kapoor
2017 Ramesh K. Agarwal
John W. Cipolla
Michael F. Modest
2018 Portonovo S. Ayyaswamy
Alan Needleman
Robert M. Nerem
Frank E. Talke
2019 Bilal M. Ayyub
D. Yogi Goswami
Amir Faghri

INTERNAL COMBUSTION ENGINE AWARD

The Internal Combustion Engine Award (previously the Diesel and Gas Engine Power Award) is given in recognition of eminent achievement or distinguished contribution over a substantial period of time, which may result from research, innovation, or education in advancing the art of engineering in the field of internal combustion engines; or in directing the efforts and accomplishments of those engaged in engineering practice in the design, development, application, and operation of internal combustion engines.

In 1966, by bequest, the Diesel and Gas Engine Power Division established this award.

INTERNAL COMBUSTION ENGINE AWARD RECIPIENTS

1967 Frederick P. Porter 1969 Leo T. Brinson, Jr. 1971 Melvin J. Helmich 1972 R. Rex Robinson 1973 Warren A. Rhoades 1974 Warren J. Severin 1975 William Spelcher 1979 Helmuth G. Braendel 1981 Phillip S. Myers 1982 David B. Field 1983 James H. Garrett 1984 Samuel S. Lestz

2012 Nicholas P. Cernansky 2013 John H. Johnson 2014 Robert M. Wagner 2015 Volker Sick 2016 Terrence F. Alger II 2017 Paul Miles 2018 Dennis L. Siebers 2019 Peter K. Senecal

2011 Rolf D. Reitz

1985 John M. Bailey 1986 Hugh A. Williams, Jr. 1987 Garin M. VanDeMark 1989 Richard D. Kieser 1990 Daniel C. Garvey 1991 Fred S. Schaub 1992 John A. Kimberley 1993 Edward F. Obert 1994 Otto A. Uyehara 1995 John C. Hallinan 1997 Benny Ballheimer 1999 Serge Gratch 2000 Charles A. Amann 2002 Warren E. Snyder 2003 Rodica A. Baranescu 2004 Humphrey Niven 2005 Karl J. Springer 2006 N. Richard Dunteman 2007 Paul R. Danyluk 2008 Dionissios N. Assanis 2009 Ronald D. Matthews

J.P. DEN HARTOG AWARD

The J.P. Den Hartog Award is given in recognition for lifetime contributions to the teaching and practice of vibration engineering.

The award was established by the Design Engineering Division in 1987 and operated as a Divisional Award until 2010, when it was elevated to a Society-level award.

J.P. DEN HARTOG AWARD RECIPIENTS

2011 Chieh-Su Hsu

2010 John E. Dec

2013 Peter B. Hagedorn

2015 David John Ewins

2017 Kon-Well Wang

2019 Singiresu S. Rao

J. HALL TAYLOR MEDAL

The J. Hall Taylor Medal is presented for distinguished service or eminent achievement in the field of codes and standards pertaining to the broad fields of piping and pressure vessels that are sponsored or undertaken by ASME. The scope shall include contributions to technical advancement and administration.

Candidates may be of any age. They should preferably be members of the Society, but this is not an essential criterion.

In 1965, by a bequest through the ASME activity in codes and standards, the Taylor Forge and Pipe Works established this award to commemorate the pioneering work of J. Hall Taylor in the field of standardization of industrial products and safety codes for their usage.

J. HALL TAYLOR MEDALISTS

1966 Frank S.G. Williams 1967 David B. Wesstrom 1968 Max B. Higgins 1969 Everett O. Waters 1970 Bernard F. Langer 1971 James M. Guy 1972 William Rolfe Gall 1973 John D. Mattimore 1974 Jean E. Lattan 1975 Walter H. Davidson Frederick A. Hough Joe J. King Burton T. Mast Andrew J. Shoup 1977 James S. Clarke Raymond R. Maccary 1978 Adolph O. Schaefer 1979 John F. Harvey 1980 Paul M. Brister 1981 Robert J. Cepluch 1982 George V. Smith 1983 Lowell L. Elder

1984 William D. Doty 1985 Robert C. Griffin 1986 James R. Farr 1987 Stephen A. Bergman 1988 George E. Fratcher 1989 Walter R. Mikesell 1990 William R. Apblett, Jr. 1991 Bernard W. Bace 1992 Maan H. Jawad 1993 Clyde C. Neely 1994 Domenic A. Canonico 1995 Guido G. Karcher 1996 Marcus N. Bressler 1997 John R. MacKay 1998 Martin D. Bernstein 1999 Richard E. Feigel 2000 Ernest A. Steen 2001 William N. McLean 2002 Allen Selz 2003 Michael Gold 2004 J. Robert Sims 2005 Blaine W. Roberts

2006 Thomas P. Pastor 2007 Donald F. Landers 2008 Joel G. Feldstein 2009 Owen F. Hedden 2010 Urey R. Miller 2011 Mahendra D. Rana 2012 Jeffrey F. Henry 2013 David Berger 2014 Charles Becht IV 2015 Peter A. Molvie 2016 Jon E. Batey 2017 Ronald W. Haupt 2018 Daniel T. Peters 2019 Walter J. Sperko

JAMES HARRY POTTER GOLD MEDAL

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

JAMES HARRY POTTER GOLD MEDALISTS

1999 C. Thomas Avedisian 1980 Alexander L. London 1981 Joseph Kestin 2000 Dimos Poulikakos 1982 Paul Leung 2001 Kunio Yoshikawa 1983 Kenneth C. Cotton 2003 Aswhani K. Gupta 1984 Robert H. Page 2004 Van P. Carey 1985 Warren H. Giedt 2005 Amir Faghri 1986 Jack P. Holman 2006 Richard O. Buckius 1988 Richard A. Gaggioli 2007 Satwindar Sing Sadhal 1990 Adrian Bejan 2008 Merle C. Potter 1991 James B. Jones 2009 Claus Borgnakke 2010 Massoud Kaviany 1992 David Japikse 1993 George J. Silvestri, Jr. 2011 Mohamad Metghalchi 1995 Elias P. Gyftopoulos 2012 Essam E. Khalil 1996 Antonio Valero 2013 Sanford A. Klein

1997 Michael J. Moran 2014 Michael R. von Spakovsky 1998 George Tsatsaronis 2015 Ahmed F. Ghoniem 2016 Derek Bradley 2018 Raj M. Manglik

JAMES N. LANDIS MEDAL

The James N. Landis Medal is given for outstanding personal performance related to designing, constructing, or managing the operation of major steam-powered electric stations using nuclear or fossil fuels, coupled with personal leadership in humanitarian pursuits, which may include committee activity, Section leadership, or the broad non-technical, professional activity of the individual's engineering society.

The award was established in 1977 in honor of James N. Landis, President of ASME in 1958. The award is presented preferably to a member of the Society.

JAMES N. LANDIS MEDALISTS

1977 James N. Landis 1996 Robert P. McDonald 1978 William E. Hopkins 1999 Zack T. Pate 1980 Harvey F. Brush 2000 P.J. Adam, Jr. 2001 Corbin A. McNeill, Jr. 1981 Vincent S. Boyer 1982 Huberto R. Platz 2002 Elmer B. Harris 1983 Byron Lee, Jr. 2003 William D. Magwood, IV 1984 Mendall H. Long 2004 Toshiaki Hasegawa 1986 John W. Turk, Jr. Ashwani K. Gupta 2006 Harold R. Denton 1987 Warren H. Owen 1989 Wallace B. Behnke, Jr. 2008 Dale E. Klein 1990 John E. Dolan 2010 Regis A. Matzie 1991 William S. Lee 2012 Peter B. Lyons 1992 George V. McGowan 2014 Susumu Mochida 2017 Yassin A. Hassan 1993 Roland J. Jensen 1994 Osmund W. Dixon 1995 Eugene V. Abraham

JOHNSON & JOHNSON CONSUMER COMPANIES, INC. MEDAL

The ASME Johnson & Johnson Consumer Companies, Inc. Medal, bestowed by the ASME Board on Diversity and Outreach and Johnson & Johnson Consumer Companies, Inc., recognizes outstanding contribution by an individual, company, government entity, school, or other organization toward developing and implementing practices, processes and programs that value and strategically manage diversity and inclusiveness.

Award applicants must be a member of ASME or of a recognized engineering/professional society. If the applicant is an institution or organization, it must have had an established program in operation for a minimum of three years with more than 25 active participants.

Lastly, the applicant must not have been involved with litigation related to discrimination or harassment within the past three years.

The award was established by the Board on Diversity and Outreach in 2004 through the generous contributions of individual ASME members and Johnson & Johnson Consumer Companies, Inc.

JOHNSON & JOHNSON CONSUMER COMPANIES, INC. MEDALISTS

2005 Joseph Bordogna
2006 Abel Hernandez-Guerrero
2007 Genesys Works
2008 Klod Kokini
2009 Richmond Area Program
for Minorities in
Engineering, Inc.
2012 Penn State University
Engineering Ambassadors
Program

KATE GLEASON AWARD

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

KATE GLEASON AWARD RECIPIENTS

2011 Yvonne C. Brill

2012 Edith H. Stern

2013 Ann P. Dowling

2014 Ursula M. Burns

2015 F. Suzanne Jenniches

2016 Helen L. Reed

2018 Awatef A. Hamed

M. EUGENE MERCHANT MANUFACTURING MEDAL OF ASME/SME

The M. Eugene Merchant Manufacturing Medal of ASME/SME is awarded to an individual who has had significant influence and responsibility for improving the productivity and efficiency (either by research or by implementation of research) of the manufacturing operation(s).

This award was established in 1986 by ASME and the Society of Manufacturing Engineers in honor of M. Eugene Merchant.

M. EUGENE MERCHANT MANUFACTURING MEDALISTS

2019 Sujeet Chand

1987 Seiuemon Inaba

1988 Donald E. Petersen

1989 Brian H. Rowe

1990 Thorton A. Wilson

1991 Edson I. Gaylord

1992 Günter Spur

1993 Robert H. Wentorf, Jr.

1994 George M.C. Fisher

1995 Laurence C. Seifert

1996 Erich Bloch

1997 Norman R. Augustine

1998 James F. Lardner

1999 W. Dale Compton

2000 Koichi Nishimura

2001 Geoffrey Boothroyd 2002 Richard E. Dauch

2003 Branimir F. von Turkovich

2004 David A. Stephenson

2005 James J. Padilla

2006 Yoram Koren

2007 Takeo Nakagawa

2008 James B. Bryan

2009 Patrick A. McKeown

2010 Gary L. Cowger

2011 Ranga Komanduri

2012 Chul B. Park

2013 Bryan G. Dods

2014 Dean L. Bartles

2015 David Dornfeld

2016 Jyotirmoy Mazumder

2017 Michael F. Molnar

2018 Kamlakar Rajurkar

MACHINE DESIGN AWARD

The Machine Design Award recognizes eminent achievement of distinguished service in the field of machine design, which is considered to include application, research, development, or teaching of machine design.

In 1958, the Machine Design Division (now Design Engineering Division) established the award.

MACHINE DESIGN AWARD RECIPIENTS

1959 Charles E. Crede 1988 Hamilton H. Mabie 1960 Rudolph E. Peterson 1989 Arthur G. Erdman 1961 Robert G. LeTourneau 1990 Charles R. Mischke 1962 J.F. Downie Smith 1991 F.R. Erskine Crossley 1963 Colin Carmichael 1992 Edward J. Haug, Jr. 1964 Rufus Oldenburger 1993 Charles O. Smith 1965 Arthur M. Wahl 1994 Kenneth J. Waldron 1966 Beno Sternlicht 1995 Ray C. Johnson 1967 Ernest Wildhaber 1996 Hans A. Eschenauer 1968 C. Walton Musser 1997 Jack A. Collins 1969 Eugene L. Radzimovsky 1999 Panos Y. Papalambros 2000 Joseph Duffy 1970 Reynold B. Johnson 1971 Walter L. Starkey 2001 Steven Dubowsky 1972 Ferdinand Freudenstein 2002 Robert L. Norton 1974 Allen S. Hall, Jr. 2003 Richard F. Salant 1975 George N. Sandor 2004 Sridhar Kota 1976 Charles W. Radcliffe 2005 Bahram Ravani 1977 Mathew M. Kuts 2006 Itzhak Green 1978 Ali A. Seireg 2007 Steven A. Velinsky 1979 Robert R. Slaymaker 2008 Alexander H. Slocum 1980 Merhyle F. Spotts 2009 J. Michael McCarthy 1981 Henry O. Fuchs 2010 Jahangir S. Rastegar 2013 Clément Gosselin 1982 Delbert Tesar 1983 Edward J. Wellauer 2014 Larry L. Howell 1984 Bernard Roth 2015 Jorge Angeles 1985 Joseph E. Shigley 2016 Sunil K. Agrawal 1986 Atmaram H. Soni 2017 S.V. Sreenivasan 1987 Gerard G. Lowen 2018 John J. Uicker Jr.

2019 Gregory S Chirikjian

MARSHALL B. PETERSON AWARD

The Marshall P. Peterson Award is given in recognition of an early-career achievement and promise for pursuit of research in tribology. At the time the award is given (October of even-numbered years), the nominee's age shall be less than 30 years. Selection will be made based on early achievement in research as demonstrated by papers published in scientific journals of ASME (e.g., *Journal of Manufacturing Science and Engineering*), potential for excellence in pursuit of research, and relevance of the research to the subject of this award, i.e., material aspects of tribology.

The Research Committee on Tribology and the Tribology Division established this award in 1997 to encourage young engineers to pursue research related to tribology. The award shall be presented at the following ASME Congress.

MARSHALL B. PETERSON AWARD RECIPIENTS

1998 Wallace G. Sawyer 2000 Mathew P. Szolwinski 2002 Jiaxin Zhao 2004 Deborah A. Wilde 2006 Nicolas Fillot

2008 David L. Burris

2010 Andrew R. Konicek

2012 Melih Eriten

2014 Brandon Krick

2016 Harmandeep S. Khare

MAYO D. HERSEY AWARD

The Mayo D. Hersey Award is bestowed on an individual in recognition of distinguished and continued contributions over a substantial period of time to the advancement of lubrication science and engineering. Distinguished contributions may result from significant original research in one or more of the many scientific disciplines related to lubrication, from excellence and creativity in lubrication engineering practice, or from sustained and forthright efforts and dissemination of information on the theory and practice of lubrication.

The recipient need not hold membership in ASME.

To recognize the splendid leadership in lubrication science and engineering of Mayo D. Hersey, this award was established in 1965 by the joint bequest of the ASME Lubrication Division (now Tribology Division) and the ASME Research Committee on Lubrication (now Research Committee on Tribology).

MAYO D. HERSEY AWARD RECIPIENTS

1965 Mayo D. Hersey

1966 Harmen Blok

1967 Milton C. Shaw

1968 Ragnar Holm

1969 William A. Zisman

1970 Merrell R. Fenske

1971 Dudley D. Fuller

1972 Sydney J. Needs

1973 Donald F. Wilcock

1974 David Tabor

1975 Arthur F. Underwood

1976 John Boyd

1977 Robert L. Johnson

1978 Edward A. Saibel

1979 Duncan Dowson

1980 Nicolae Tipei

1981 Edmond E. Bisson

1982 E. Erwin Klaus

1983 Donald F. Hays

1984 Frederick F. Ling

1985 Ernest Rabinowicz

1986 Ward O. Winer

1987 Marshall B. Peterson

1988 Donald G. Flom

1989 John F. Archard

1990 Herbert S. Cheng

1991 Kenneth L. Johnson

1992 Maurice Godet

1993 Alistair Cameron

1994 Harold G. Elrod, Jr.

1995 Kenneth C. Ludema

1996 James A. Greenwood

1997 Albert A. Raimondi 1998 Jean Marie Georges

1999 David B. Bogy

2000 Bernard J. Hamrock

2001 Said Jahanmir

2002 Michael N. Gardos

2003 Jean B. M. Frene

2004 Hugh A. Spikes

2005 Andrew Jackson

2006 Koji Kato

2007 Hooshang Heshmat

2008 Leon M. Keer

2009 Richard F. Salant

2010 Frank E. Talke

2011 Farshid Sadeghi

2012 Francis E. Kennedy, Jr.

2013 Michael M. Khonsari

2014 John A. Tichy

2015 Ali Erdemir

2016 Izhak Etsion 2017 James R. Barber

2018 Andreas A. Polycarpou

2019 Lavern D. Wedeven

MCDONALD MENTORING AWARD

The ASME McDonald Mentoring Award established in 2007 recognizes the outstanding mentoring of other professionals by an engineer in industry, government, education, or private practice. The ASME McDonald Mentoring Award is an international award in that most recipients will be individuals residing outside the United States.

Candidates for this award must have attained, as a minimum, a record of outstanding performance in the following areas:

- 1. Contribute significantly to the engineering community. Served as an effective advocate and guide and exhibited true concern for mentees;
- 2. Demonstrate a portion of their mentoring or advising activities within the past five years;
- 3. Demonstrate the impact of practices, processes and programs established by the nominee;
- 4. Must be a member of ASME, or another ICOMES member society, for at least five years, as well as when receiving the award;
- 5. Have a baccalaureate or equivalent degree in a recognized field of engineering or engineering science, but not necessary in mechanical engineering.

MCDONALD MENTORING AWARD RECIPIENTS

2010 Dario Solis 2011 Robert Birkmyre 2012 Timothy S. Fisher 2013 Abel Hernandez-Guerrero 2014 Nael Barakat 2015 Carlos L. Lasarte V

2016 Luciano Castillo

2018 Robert M. Wagner 2019 Naomi C. Chesler

MELVIN R. GREEN CODES & STANDARDS MEDAL

The Melvin R. Green Codes and Standards Medal is bestowed in recognition of outstanding contributions to the development of documents, objects, or devices used in any part of the national or international ASME programs of technical codification, standardization, and certification.

The award shall be made to an individual (or individuals, in exceptional circumstances) who has served on ASME Committees or American National Standards Committees or International Standards Technical Advisory Groups administered by ASME. An individual need not be an ASME member to qualify. The award was established by the Society in 1976.

In 1996, to honor his memory and extraordinary contributions to ASME's Codes and Standards program, the Board of Governors renamed the award the "Melvin R. Green Codes and Standards Medal".

MELVIN R. GREEN CODES & STANDARDS MEDALISTS

2013 Sidney A. Bernsen

2014 James W. Coaker

2015 James A. Thomas

1977 William G. McLean 1978 Leonard P. Zick 1979 Joseph F. Sebald 1980 George F. Habach 1981 Roy P. Trowbridge 1982 James W. Murdock 1983 Walter L. Harding 1984 Melvin R. Green 1985 Paul M. Brister 1986 William E. Cooper 1987 Jack B. Levy 1988 John H. Fernandes 1989 Howard F. Dobel 1990 Robert J. Bosnak 1991 Arthur R. Machell, Jr. 1992 Walter R. Mikesell, Jr. 1993 Wendell P. Johnson 1994 Oscar J. Fisher

1995 James R. Farr 1996 Guy A. Arlotto 1997 Spencer H. Bush 1998 Robert L. Dick 1999 Domenic A. Canonico 2000 Richard E. Feigel 2001 Lawrence J. Chockie 2002 Donald R. Frikken 2003 James A. Perry 2004 Edward A. Donoghue 2005 James H. Turner, Jr. 2006 J. Robert Sims, Jr. 2007 Guido G. Karcher 2008 Kenneth R. Balkey 2009 Louis E. Hayden, Jr

2010 June Ling

2011 Thomas P. Pastor

2012 Mohinder L. Nayyar

bert L. Dick
menic A. Canonico
chard E. Feigel
wrence J. Chockie
nald R. Frikken
nes A. Perry
ward A. Donoghue
nes H. Turner, Jr.
Robert Sims, Jr.

MILTON C. SHAW MANUFACTURING RESEARCH MEDAL

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

The award was established in 2009 to honor Milton C. Shaw for being one of the most distinguished and influential researchers and educators in the 20th century in the field of manufacturing engineering, not only in the United States but internationally.

MILTON C. SHAW MANUFACTURING RESEARCH MEDALISTS

2011 Tetsutaro Hosni

2012 Kornel F. Ehmann

2013 I.S. Jawahir

2014 Albert Shih

2015 Y. Lawrence Yao

2016 Steven Y. Liang

2017 Shaochen Chen

2018 Ming C. Leu

2019 Srinivasan Chandrasekar

NADAI MEDAL

The Nadai Medal recognizes distinctive contributions to the field of engineering materials.

The Nadai Medal was established in 1975 on the proposal of the Materials Division to honor Arpad L. Nadai, who was a pioneer in the field of engineering materials, contributing particularly to the area of plasticity.

His perspective also enabled him to give strong impetus to development in fatigue and high temperature behavior.

NADAI MEDALISTS

1976 Evan Albert Davis 1977 George R. Irwin 1978 Frank A. McClintock 1979 Louis F. Coffin, Jr. 1980 Michael J. Manjoine 1981 S. Stanford Manson 1982 Iain Finnie 1983 Arthur J. McEvily, Jr. 1984 Thomas J. Dolan 1985 Sumio Yukawa 1986 William F. Brown, Jr. 1987 Erhard Krempl

1975 George M. Sinclair

1988 Herbert T. Corten 1990 Stephen D. Antolovich 1991 John W. Hutchinson 1992 George J. Dvorak 1993 William N. Sharpe, Jr. 1994 Owen Richmond 1995 Nicolaie D. Cristescu 1996 James R. Rice

1997 David L. McDowell 1998 Ali S. Argon

1998 All S. Argon

1999 John P. Hirth

2000 Frederick A. Leckie

2001 William D. Nix

2002 Sia Nemat-Nasser 2003 Anthony G. Evans

2004 Robert O. Ritchie

2005 Theodore Nicholas

2006 Richard M. Christensen

2007 Huseyin Sehitoglu

2008 Zděnek P. Bažant

2009 Lambert Ben Freund

2010 Albert S. Kobayashi

2011 Subra Suresh

2012 Satya N. Atluri

2013 Tsu-Wei Chou

2014 L. Catherine Brinson

2015 Huajian Gao

2016 Yonggang Huang

2017 John A. Rogers

2018 George M. Pharr

2019 Ellen M. Arruda

NANCY DELOYE FITZROY AND ROLAND V. FITZROY MEDAL

The Nancy DeLoye Fitzroy and Roland V. Fitzroy Medal, established in 2011, recognizes pioneering contributions to the frontiers of engineering leading to breakthrough(s) in existing technology or leading to new applications or new areas of engineering endeavor.

NANCY DELOYE FITZROY AND ROLAND V. FITZROY MEDALISTS

2012 Charles H. Townes 2013 Andrew J. Viterbi 2014 Xiang Zhang 2015 George W. Sutton 2016 Evangelos T. Laskaris 2018 Ivar Giaever

OLD GUARD EARLY CAREER AWARD

The Old Guard Early Career Award is aimed at furthering the goal of the Old Guard to help the young engineer bridge the gap between college and professional life. Its intent is to bring that individual closer to the activities of ASME by providing encouragement for graduating Student Members to upgrade to Member and actively become involved in the work of the Society. This award was established by the Old Guard Committee in 1994.

OLD GUARD EARLY CAREER AWARD RECIPIENTS

1995 Brian K. Miller 1996 Robert E. Lund 1997 Jeff A. Gessaman 1999 Connie J. Buynacek 2000 John T. Maine 2002 Susan M. Shumate 2003 Kenneth P. Horne 2004 Matthew L. Robinson 2005 Howard Berkof 2006 Catherine Q. Lengsfeld 2007 Candice A. Bauer 2008 Jennifer R. Jewers 2009 Kalan R. Guiley 2010 Aaron J. Ryan 2011 Julie A. Kulik

2012 Anita Rebarchak 2013 Jared B. Garrison 2014 Andres E. Rondon Marin 2015 Twishansh Mehta 2016 Nathaniel D. Taylor 2017 Caitlin Correll 2018 Michael P. Brundage 2019 Lee Clemon

OLD GUARD PRIZES FOR ASME STUDENT MEMBERS

The Old Guard is made up of ASME dues-exempt members, those who have reached the age of 65 and have retired. They continue to contribute to the Society and their contributions are used to support the Old Guard Prizes and similar Society activities related to the younger members.

The Prizes are awarded annually for the best four presentations of technical papers at the Society-wide contest during the ASME International Mechanical Engineering Congress. The contest is among the Student Members who won first prize at each Regional Student Conference. All contestants receive an expense-paid trip to the Congress.

The Prize was established in 1956 to recognize the overall winner. In 1981, it was expanded to include second- and third-place winners, and in 1992, a fourth-place winner was added.

OLD GUARD - 1st PRIZE RECIPIENTS

1956 Joseph W. Jacobson 1957 George M. Reynolds 1958 Harry Hollinghaus 1959 James S. Kishi 1960 Joseph W. Lindsey 1961 Joseph J. Marino 1962 Jay S. Fein

1963 Walter Clark Dean II 1964 Robert J. Arnzen 1965 Joseph P. Collins 1966 John A. Leo III 1967 William E. Hughes 1968 Maurice H. Bunn 1969 Walter H. Peters III 1970 Joseph R. Titone 1971 James L. Lee 1972 Stanley W. Blossom 1973 Steven H. Blossom

1974 Gary L. Smith 1975 Steven R. Bussolari 1976 Paul E. Hollis 1977 Pauline B. Cramer 1978 Jan D. Dozier 1979 Joe D. Kececioglu 1980 John J. Marsal

1981 Dan J. Schmitt 1982 Gary F. St. Onge

1983 Jonathan R. Willey 1984 Jeffrey McAllister 1985 Ed Rissberger

1986 Chris Della Corte

1987 Shannon S. Breon 1988 John H. Barrett 1989 Michael B. Hogan 1990 Craig N. Gawreluk

1991 Karen S. Schlangen 1992 Kevin Naziri 1993 Irene J. Beyerlein

1994 Jeffrey La Borde 1995 Kelly Habicht 1996 Janea Stulp 1997 Scott Wenger 1998 Victoria E. Wood

1999 D. Nathaniel Mulcahy

2000 Kristen Busko 2001 Daniel B. Vicario University of Texas Northwestern University University of Utah University of Texas University of Utah University of Connecticut Rutgers University Lehigh University

Washington University/St. Louis University of Wisconsin Auburn University Brigham Young University

Arizona State University Auburn University Cornell University Auburn University

Oklahoma State University Oklahoma State University Oklahoma State University

Union College

University of Washington University of Washington Auburn University University of Arizona Tulane University Oklahoma State University

Union College

San Diego State University Brigham Young University Columbia University

Case Western Reserve University

Iowa State University Tufts University Auburn University Montana State University University of Minnesota

California State Poly/Pomona Clemson University Louisiana State University San Diego State University Colorado State University Virginia Polytechnic Institute

University of Tulsa

University of Mass. at Amherst

Gonzaga University Villanova University

2002 Jonathan A. Amory 2003 Jill C. Anderson 2004 Sarah Plymale 2005 Sara Coulthard 2006 Stephen Hart 2007 Russell Aldridge 2008 Joy Davis 2009 Matthew Hollis 2010 Maxim Budyansky 2011 Allison Johnson 2012 Brian Dutra 2013 Zachary Young

Trinity College Boston University LeTourneau University United States Naval Academy Ohio State University Brigham Young University Wright State University Cedarville University University of Connecticut University of Tulsa Western New England University

Cedarville University

OLD GUARD - 2nd PRIZE RECIPIENTS

1982 John I. Macy University of Kansas 1983 Richard F. Beaufort Brigham Young University 1984 John DiMarco University of Dayton 1985 Michael T. Nelson Clemson University 1986 Thomas Cavallaro Clemson University Vanderbilt University 1987 Marc Richelsoph 1988 Rocke R. Koreis Seattle University 1989 James N. Cantrell Utah State

Virginia Polytechnic Institute 1990 Moji I. Ijaz 1991 Alan K. Jones Portland State University 1992 John Jraiche University of Windsor 1993 Andrew M. Dudas **Bradley University** Purdue University 1994 Todd M Beller University of Windsor 1995 Allan D. Parks 1996 Michael Ogg Christian Brothers University Wichita State University 1997 David B. Lenhert University of NC at Charlotte 1998 Jeremy C. Patterson 1999 John M. R. Rask Le Tourneau University Le Tourneau University 2000 Paul Hvass 2001 Jared Fryar University of Portland 2002 Marie K. Moran University of Tulsa Union College 2003 Smitesh Bakrania 2004 Brian Montague Cedarville University 2005 Conall Dempsey University of Illinois 2006 Matthew Teicholz University of Connecticut 2007 Shannon Yee The Ohio State University 2008 Jeff Lombardo University of Connecticut 2009 Shiyu Liu Nanyang Tech. Univ., Singapore

2010 Carol Regalbuto University of Illinois 2011 Adam Kimberlin Tennessee Technology University

2012 Pejmon Abrarpour Texas Tech 2013 Jerry Wang

Yale University

OLD GUARD – 3rd PRIZE RECIPIENTS

1982 Douglas R. Watson 1983 Joseph R. Olivier 1984 Daniel B. Grandmont 1985 Brian D. Berthold 1986 Daniel M. Browning 1987 Michael L. Hoskins 1988 Margaret F. Pinnell 1989 James L. Kahler 1990 Leland G. Hansen 1991 Craig J. Speier

1992 Jerry R. Volcy

1993 Eric L. Callens

1994 Lee R. Johnson, Jr. 1995 Wendy B. Scheibout 1996 Darrin Noe

1997 Gretchen Voegler 1998 Julie A. Katz 1999 Kip Jensen 2000 John Milos

2001 Andre McDonald 2002 Francis X. Murphy 2003 Preston Pysh 2004 Amber Raub Walker 2005 Robert Graudins 2006 John Souza

2007 Stephen T. Clark

San Diego State University Tulane University Western New England College

University of New Mexico

Oregon State University

California State University/Chico University of Dayton South Dakota State University Brigham Young University

University of California at Santa Barbara

New Jersey Institute of

Technology

Louisiana Technical University

Union College Dordt College Seattle University Union College **Bradley University** Brigham Young University New Jersey Institute of Technology

City College of New York US Military Academy US Military Academy US Military Academy Seattle University

University of NC, Charlotte

Duke University

2008 Brian Wilks 2009 Alex Scott 2010 Caroline Scheck 2011 Sirko Bartholomay 2012 Alex Russomanno 2013 Thomas Larson

Texas A&M University Loughborough University, UK University of Maryland ISAE-Toulouse, France University of Virginia University of Washington

OLD GUARD – 4th PRIZE RECIPIENTS

1992 Eric L. Callens
 1993 Jason A. Pepin
 Louisiana Technical University
 University of Massachusetts

1994 David R. Smith, II
1995 Brian S. Mansure
1996 Jesse Adams
University of Wyoming
University of Nevada, Reno
California Polytechnic State
University/San Louis Obispo

1998 Mark A. Kurfman
1999 Paula Jean Runge
2000 Cory Cooper
2001 Jonathan Slager
2002 David M. Chapin

St. Louis University at Parks Coll.
Mississippi State University
US Air Force Academy
Torneau University
Union College

2003 William ErwinVanderbilt University2004 Lincoln PotwinWentworth University2005 Thomas BarryUniversity of Hartford2006 Matthew McCrinkBoise State University2007 Andrew GustafsonCalifornia State University2008 Daniel KochUniversity of Colorado-Denver

2009 Hunter McLelland Tennessee Technological

University

2010 Daniel Gerber University of Alabama

2011 Alan Chatterton University of Idaho
2012 Luke Fredette Cedarville University
2013 Kristian Saull Loughborough University

PATRICK J. HIGGINS AWARD

The Patrick J. Higgins Award was established in 2007 to recognize an individual who has contributed to the enhancement of standardization through contributions to the development and promotion of ASME Codes and Standards or Conformity Assessment Programs in the following areas: Plumbing Materials & Equipment; Screw Threads; Tools (machine, cutting and hand); Fasteners, (e.g., bolts, nuts, rivets, screws, washers); Chain, Attachments and Sprockets for Power Transmission & Conveying; Metal & Metal Alloy Wrought Mill Product Nominal Sizes; Pressure and Temperature Instruments & Accessories; Classification & Designation of Surface Qualities; Gage Blanks; Chemical Standard Pumps; Dimensional Metrology; Industrial System Energy Assessment; Overhead Hoists; Measurement of Fluid Flow in Closed Conduits; Reliability, Availability, and Maintainability of Power Plants; Steel Stacks; Verification and Validation in Computational Modeling and Simulation; and Engineering Drawing and Related Documentation Practices.

The award was established by the Board on Standardization & Testing to honor Patrick J. Higgins, who was the long standing Chairman of the A112 Committee on Plumbing Materials & Equipment and a member of the Board on Standardization.

PATRICK J. HIGGINS AWARD RECIPIENTS

2008 Morris Kimboff 2018 Julius A. Ballanco 2009 Jayaraman Raja 2019 Christopher J. Freitas

2010 Archie R. Anderson 2011 Sally A. Remedios 2012 Frederick G. Parsons

2013 Robert J. DeBoom

2014 Brian Parry

2015 Shabbir M. Rawalpindiwala

2016 Frank Bakos

2017 Thomas Charlton, Jr.

PER BRUEL GOLD MEDAL FOR NOISE CONTROL AND ACOUSTICS MEDAL

The Per Bruel Gold Medal for Noise Control and Acoustics is given in recognition of eminent achievement and extraordinary merit in the field of Noise Control and Acoustics. The achievement must include useful applications of the principles of noise control and acoustics to the art and science of mechanical engineering.

The medal was established in 1987 in recognition of Dr. Per Bruel, who pioneered the development of sophisticated noise and vibration measuring and processing equipment.

PER BRUEL GOLD MEDAL FOR NOISE CONTROL AND ACOUSTICS MEDALISTS

1989 K. Uno Ingard 2005 Adnan Akay 1990 Lothar Cremer 2006 Cyril M. Harris 1991 Alan Powell 2007 Jerry H. Ginsberg 1992 Miguel C. Junger 2009 Earl G. Williams 1993 David Crighton 2011 Mardi C. Hastings 1994 Eric E. Ungar 2012 Theodore M. Farabee 2013 Richard H. Lyon 1995 Allan D. Pierce 1996 Maurice M. Sevik 2014 Andrew N. Norris 2015 David T. Blackstock 1997 John E. F. Williams 2000 Michael S. Howe 2016 Patricia Davies 2001 Gary H. Koopmann 2017 Malcolm Crocker 2018 Sean F. Wu 2002 Ira Dyer 2003 David Feit 2019 Karl Grosh 2004 Leo L. Beranek

PERFORMANCE TEST CODES MEDAL

The Performance Test Codes Medal is to be awarded to an individual (or individuals, in exceptional circumstances) who has made outstanding contributions to the development and promotion of ASME Performance Test Codes, including the Supplements on Instruments and Apparatus.

The medal was established to recognize the first voluntary codes and standards activity in the Society and in the United States. Many of the Codes are recognized throughout the world for their excellence, providing industry and the engineering community with the technology that promotes the philosophy of accurate and reliable performance evaluation.

This is the first award to recognize meritorious service in the Performance Test Codes area of the Society. The award was established in 1981 by contributions to the Performance Test Codes of the Society.

PERFORMANCE TEST CODES MEDALISTS

1984 Kenneth C. Cotton 2003 Jeffrey R. Friedman William G. McLean 2005 Samuel J. Korellis 1985 James W. Murdock 2006 John W. Siegmund 1986 John H. Fernandes 2008 Joseph W. Mitlon 1987 P.H. "Pete" Knowlton, Jr. 2009 Steven P. Nuspl 1988 Charles B. Scharp 2010 Gordon J. Gerber 1989 Frederick H. Light 2011 W. Cary Campbell 2012 Paul G. Albert 1990 Karl G. Grothues 1991 Robert Jorgensen 2013 Patrick M. McHale 2014 W. Glenn Steele, Jr. 1992 Joseph S. Davis, Jr 1993 Philip M. Gerhart 2015 Thomas C. Heil 1995 Silas L. Morse 2016 Matthew J. Dooley 1996 Ronald L. Bannister 2017 Thomas K. Kirkpatrick 1997 Norman R. Deming 2018 Michael P. McHale 1998 David R. Keyser 2019 Steven A. Scavuzzo 1999 Roy P. Allen 2000 John C. Westcott 2001 Ronald H. Dieck

2002 John M. Burns

PI TAU SIGMA AWARDS

In 1938, Pi Tau Sigma (Honorary Mechanical Engineering Fraternity) arranged with ASME for the joint award of the Pi Tau Sigma Gold Medal. This medal is awarded for outstanding achievement in mechanical engineering to an engineer within ten years after graduation from the regular engineering course or related field of a recognized college or university.

In 1944, the Charles Russ Richards Award was simtablished as a joint award of Pi Tau Sigma and ASME to recognize the outstanding achievement in mechanical engineering or related field by the engineering graduate within twenty to twenty-five years following graduation.

In 1973, Pi Tau Sigma and ASME entered into a new agreement which continued the existing awards and added the Gustus L. Larson Award to honor engineering graduates for outstanding achievement in mechanical engineering or related field between 10 and 20 years after graduation. Funding was provided from the ASME Ward S. and Editha Jacobs Fund. The qualifications for the recipients of each of the three awards are identical, except for the period of recognized achievements. In each case, the recipient shall have received a baccalaureate degree from a regular engineering curriculum of a recognized college or university and shall have attained outstanding achievement within the period stated for each award. Achievement shall be all or in part in any field, including industrial, educational, political, research, civic, and artistic. The candidate's achievements will be examined for an application of basic engineering methods or principles.

The three awards are administered by a Joint Board of Award appointed by Pi Tau Sigma and ASME. The Chair is a Pi Tau Sigma appointee. The Board requests nominees from ASME Sections and others on forms it provides. The Board submits the names and records of the persons selected for the three awards to the ASME Committee on Honors for the formal choice of the recipients.

PI TAU SIGMA GOLD MEDAL

The Pi Tau Sigma Gold Medal recognizes outstanding achievement in mechanical engineering within ten years following graduation with a baccalaureate (bachelors) degree in Mechanical Engineering or related field. The award is bestowed for overall outstanding achievement in the mechanical engineering field during the set period of time.

The medal was established by Pi Tau Sigma in 1938 in coordination with ASME.

PI TAU SIGMA GOLD MEDALISTS

1938 Wilfred E. Johnson 1939 John Yellot, Jr. 1940 George A. Hawkins 1941 R. Hosmer Norris 1942 John T. Rettaliata 1943-46 No award due to war 1947 David Cochrane 1948 Walter G. Vincenti 1949 Philip S. Myers 1950 Arthur P. Adamson 1951 Warren M. Rohsenow 1952 Robert L. O'Brien 1953 Merle Baker 1954 Emmett E. Day 1955 Robert C. Dean, Jr 1956 John A. Clark	1958 Allison E. Simons 1959 Donald F. Hays 1960 George Hatsopoulos 1961 Ernest T. Selig 1962 E. Bruce Lee 1963 Herbert Richardson 1964 Richard L. Peskin 1965 John Bollinger 1966 Jason R. Lemon 1967 William O'Donnell 1968 Randall F. Barron 1969 Henry K. Newhall 1970 Richard E. Barrett 1971 James R. Rice 1972 John F. Stephens III 1973 Christian E.G. Przirembel 1974 Jace W Nunziato	1976 John S. Walker 1977 Richard E. Lovejoy 1978 David A. Peters 1980 Doyle D. Knight 1982 Pol D. Spanos 1984 Michael R. Muller 1985 Wing Kam Liu 1986 Dimos Poulikakos 1987 David L. McDowell 1988 Mark F. Hamilton 1989 Steven M. Wilson 1990 Dionissios N. Assanis 1991 Yves H. Berthelot 1993 Melany L. Hunt 1994 Zhigang Suo 1995 Thomas R. Kurfess 1996 Gregory S. Chirikjian	1999 Margaret S. Wooldridge 2000 Connie J. Buynacek 2002 Assimina A. Pelegri 2003 Bogdan I. Epureanu 2004 Kenneth A. Gall 2006 Nicholas Fang 2009 A. John Hart 2010 David L. Burris 2011 David Saintillan 2012 Amos Winter 2013 Randy Ewoldt 2014 Ibrahim T. Ozbolat 2015 Neil P Dasgupta 2016 David Henann 2017 Shannon K. Yee 2018 Nenad Miljkovic 2019 Jesse Capecelatro
		1996 Gregory S. Chirikjian 1998 Wei Chen	3

R. TOM SAWYER AWARD

The R. Tom Sawyer Award is bestowed on an individual who has made important contributions to advance the purpose of the Gas Turbine Industry and to the International Gas Turbine Institute over a substantial period of time. The contribution may be in any area of institute activity but must be marked by sustained forthright efforts.

The award was established in 1972 to honor R. Tom Sawyer who, for over four decades, toiled zealously to advance gas turbine technology in all of its aspects.

R. TOM SAWYER AWARD RECIPIENTS

RALPH COATS ROE MEDAL

In 1972, the Society established the Ralph Coats Roe Medal to be presented annually, if warranted, to an individual selected by the Society for a significant contribution to a better public understanding and appreciation of the engineer's worth to contemporary society. Candidates are not restricted by profession nor by membership in any engineering society or organization.

The successful candidate is expected to have the attributes that qualify him or her as an authoritative lecturer on his or her contribution at a general session during the International Mechanical Engineering Congress. Ralph Coats Roe was a pioneer and innovator in the design and construction of highly efficient power plants and advanced desalting processes. He was an inspiration to his colleagues by his great achievements through self-education in highly sophisticated technologies.

The medal was endowed by Burns and Roe, Inc., the corporation founded by Ralph Coats Roe.

RALPH COATS ROE MEDALISTS

1974 Emilio Q. Daddario	1987 T. Lindsay Baker	1999 Edward Wenk, Jr.	2010 Charles M. Vest
1975 Walter Sullivan	1988 Cong. Donald L. Ritter	2000 Barry I. Hyman	2011 Ioannis N. Miaoulis
1977 Robert C. Seamans, Jr.	1989 John H. Lienhard	2001 N. Jan Davis	2012 William S. Nye
1978 David Perlman	1990 Jeremy Bernstein	2002 Dean Kamen	2013 G. Wayne Clough
1979 William D. Carey	1991 Henry J. Petroski	2003 Vernon J. Ehlers	2014 Adam J. Hart-Davis
1980 Melvin Kranzberg	1992 Frank Kreith	2004 William A. Wulf	2015 Freeman A. Hrabowski III
1981 Carl Sagan	1993 Mary Lowe Good	2005 Winfred Phillips	2016 James J. Duderstadt
1982 Samuel C. Florman	1995 John Noble Wilford	2006 Bernard Amadei	2017 Adrian Bejan
1983 Tracy Kidder	1996 Norman R. Augustine	2007 Roop L. Mahajan	2018 Gwynne Shotwell
1984 Lee Iacocca	1997 Cong. George E. Brown, Jr.	2008 Shirley Ann Jackson	2019 Charles F. Bolden
1985 David Dooling, Jr.	1998 Paul B. MacCready	2009 Bonnie J. Dunbar	

RICHARD J. GOLDSTEIN ENERGY LECTURE AWARD

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

The awardee will be invited to give a public lecture. The awardee chooses a topic of his/her choice. The topic of the lecture could include, but is not limited to, one or more of the following: overview of the global and regional energy scene, availability of energy resources, solar energy, wind and alternative energy systems, geothermal energy systems, energy policy, heat transfer in energy systems, nuclear power plants, energy conversion, energy storage, and basic engineering thermal science related to energy conversion and energy use in applications.

RICHARD J. GOLDSTEIN ENERGY LECTURE AWARD RECIPIENTS

2019 Steven Chu

ROBERT E. KOSKI MEDAL

The Robert E. Koski Medal, established in 2007, recognizes individuals who have advanced the art and practice of fluid power motion and control through education and/or innovation. The honoree does not have to be a U.S. citizen or a member of ASME.

The Medal was established by the Fluid Power Systems and Technology Division to honor Robert E. Koski's contributions to the field of Design Engineering and Dynamic and Systems and Control.

ROBERT E. KOSKI MEDALISTS

2007 Wolfgang Backe 2008 Clifford R. Burrows 2009 Jan Ove Palmberg 2010 Yongxiang Lu 2011 Richard T. Burton 2012 Siegfried Helduser 2013 Wayne J. Book

2014 Hubertus J. Murrenhoff

2016 Kim A. Stelson 2017 Werner Dieter 2018 Luca G. Zarotti 2019 Peter A.J. Achten

2015 Monika Ivantysynova

ROBERT HENRY THURSTON LECTURE AWARD

The Robert Henry Thurston Lecture Award was established in 1925 in honor of Robert Henry Thurston, first president of ASME and a farseeing leader in science and engineering. The Robert Henry Thurston Lecture Award, presented annually at the International Mechanical Engineering Congress, provides an outstanding leader in pure or applied science or engineering with the honor of presenting to the Society a lecture that encourages stimulating thinking on a subject of broad technical interest to engineers. The Robert Henry Thurston Lecture Award was elevated to a Society-level award in 2000.

ROBERT HENRY THURSTON LECTURE AWARD RECIPIENTS

2001 John W. Hutchinson 2010 Ares J. Rosakis 2019 Yonggang Huang 2002 Elias P. Gyftopoulos 2011 Francis C. Moon, Jr. 2003 Yogesh Jaluria 2012 Zhigang Suo 2004 Bharat Bhushan 2013 John A. Rogers 2005 Savio L-Y. Woo 2014 Ken P. Chong 2006 Sia Nemat-Nasser 2015 Horacio D. Espinosa 2007 Wing Kam Liu 2016 Romesh C. Batra 2008 Vijay K. Dhir 2017 Mohammed A. Zikry 2009 Huajian Gao 2018 Guruswami Ravichandran

ROBERT HENRY THURSTON LECTURE AWARD RECIPIENTS (DIVISIONAL LEVEL)

1969 Jacob Ackeret 1985 Yuan-Cheng B. Fung 1986 Daniel C. Drucker 1970 Jacob P. Den Hartog 1971 Milton C. Shaw 1987 Simon Ostrach 1972 George F.Carrier 1988 Stephen H. Crandal. 1973 Henry M. Paynter 1989 Stephen J. Kline 1974 Robert W. Emmons 1990 Jack S. Kilby 1975 Myron Tribus 1991 Frank Kreith 1976 Chauncey Starr 1992 John H. Lienhard 1977 Robert C. Dean, Jr. 1993 Chang-Lin Tien 1978 Allen F. Rhodes 1994 Robert M. Nerem 1979 W. Dale Compton 1995 Paul Cooper 1996 Don P. Giddens 1980 Milton S. Plesset 1997 Raymond Viskanta 1981 John Erik Jonsson 1998 Van C. Mow 1982 Hans M. Mark 1983 Ernst R.G. Eckert 1999 Adrian Bejan 1984 Robert A. Frosch 2000 Duncan Dawson

ROBERT M. NEREM MEDAL

The Robert M. Nerem Medal is awarded to an individual for extraordinary and sustained level of lifetime achievement in the field of bioengineering education and mentoring.

Examples of meritorious activity include leadership within the nominee's institution, mentoring activities that are above and beyond those expected from others employed in similar positions, mentoring activities tailored to meet the needs of the trainees, innovative mentoring activities, and quantitative information regarding the trainees' demographics, current positions (if known), and a brief summary of their most significant accomplishments.

The medal was established in 2017 by Bioengineering Division.

ROBERT M. NEREM MEDALISTS

2018 Roger D. Kamm 2019 Kenneth R. Diller

RUFUS OLDENBURGER MEDAL

The Rufus Oldenburger Medal is awarded in recognition of significant contributions and outstanding achievements in the field of automatic control. Examples of such achievements may be in the areas of education, research, development, innovation, and service to the field and profession. Nominations are not restricted by profession, nationality, or Society membership.

The award was established in 1968 by the Automatic Control Division (now the Dynamic Systems and Control Division) to honor Rufus Oldenburger for his distinctive achievements in the field and for his service to the Society and the Division.

RUFUS OLDENBURGER MEDALISTS

1968 Rufus Oldenburger 1969 Nathaniel B. Nichols 1970 John R. Ragazzini 1971 Charles Stark Draper 1972 Albert J. Williams, Jr. 1973 Clesson E. Mason 1974 Herbert W. Ziebolz 1975 Hendrik W. Bode Harry Nyquist 1976 Rudolf Emil Kalman 1977 Gordon S. Brown Harold L. Hazen 1978 Yasundo Takahashi 1979 Henry M. Paynter 1980 Arthur E. Bryson, Jr. 1981 Shih-Ying Lee 1982 Bernard Friedland 1983 J. Lowen Shearer 1984 Herbert H. Richardson 1985 Karl J. Astrom 1986 Eliahu I. Jury 1987 Walter R. Evans 1988 Robert H. Cannon, Jr. 1989 Jaakov Z. Tsypkin

1990 Harold Chestnut 1991 John G. Truxal 1992 Issac M. Horowitz 1993 Lotfi A. Zadeh 1994 Howard H. Rosenbrock 1995 George Leitmann 1997 Thomas B. Sheridan 1996 George D. Zames 1998 David G. Luenberger 1999 Yu-Chi Ho 2000 Ioan D. Landau 2002 Masayoshi Tomizuka 2003 Vadim Utkin 2004 Alistair MacFarlane 2005 Roger W. Brockett 2006 J. Karl Hedrick 2007 Suguru Arimoto 2008 A. Galip Ulsoy 2009 Neville J. Hogan 2010 Rolf Isermann 2011 Haruhiko H. Asada 2012 Mathukumalli Vidyasagar 2013 Graham C. Goodwin 2014 Robert R. Bitmead 2015 Manfred Morari 2016 Jean-Jacques Slotine 2017 Miroslav Krstic 2018 Roberto Horowitz 2019 Huei Peng

RUTH AND JOEL SPIRA OUTSTANDING DESIGN EDUCATOR AWARD

The Ruth and Joel Spira Outstanding Design Educator Award was established as a division award in 1998. The Award was elevated to a Society award in 2001 to recognize a person who exemplifies the best in furthering engineering design education through vision, interactions with students and industry, scholarship and impact on the next generation of engineers, and a person whose action serves as a role model for other educators to emulate.

RUTH AND JOEL SPIRA OUTSTANDING DESIGN EDUCATOR AWARD RECIPIENTS

2001 Ken Wallace 2002 Kenneth K. Waldron 2003 Woodie C. Flowers 2004 Clive L. Dym 2005 Gary L. Kinzel 2006 John S. Lamancusa 2007 Panos Y. Papalambros

2008 Kosuke Ishii 2010 Sridhar Kota 2011 Farrokh Mistree

2012 David R. Wallace 2013 Douglass J. Wilde 2014 Kevin Craig 2015 Alice M. Agogino 2016 Kathryn W. Jablokow 2017 Gül E. Okudan Kremer 2018 Alexander H. Slocum 2019 Janet K. Allen

S.Y. ZAMRIK PVP MEDAL

The S.Y. Zamrik Pressure Vessels and Piping Medal is bestowed for outstanding contributions in the field of pressure vessels and piping technology including, but not limited to, research, development, teaching, and significant advancements of the state-of-the-art.

The award was established in 1980 by the Pressure Vessels and Piping Division and renamed the S.Y. Zamrik PVP Medal in 2010.

S.Y. ZAMRIK PVP MEDALISTS

1980 Dana Young 1981 Gunther P. Eschenbrenner 1982 Irwin Berman 1983 William E. Cooper 1984 Adolph O. Schaefer 1985 John F. Harvey 1986 Everett C. Rodabaugh 1987 David H. Pai 1988 Michael J. Manjoine 1989 Pedro V. Marcal 1990 Robert J. Cepluch 1991 James R. Farr 1992 Donald S. Griffin 1993 Jeffrey T. Fong 1994 William J. O'Donnell 1995 G.E. Otto Widera 1996 Sam Y. Zamrik 1997 Robert W. Swindeman 1998 Sumio Yukawa 2000 Rudolph J. Scavuzzo

2001 Shoei-Sheng Chen 2002 Alexander H. Marr 2003 Fumio Hara 2004 Greg L. Hollinger 2005 Richard C. Gwaltney 2006 Michel J. Pettigrew 2007 Carl E. Jaske 2008 Arturs Kalnins 2009 Charles Becht IV 2010 Toshiyuki Sawa 2011 William T. Springer 2012 M.K. Au-Yang 2013 William J. Bees 2014 Arthur G. Ware 2015 L. Ike Ezekoye 2016 Artin Dermenjian 2017 Mahendra D. Rana 2018 Mordechai Perl 2019 Young W. Kwon

SAFETY CODES AND STANDARDS MEDAL

The Safety Codes and Standards Medal is presented to one or more individuals who have contributed to the enhancement of public safety through the development and promotion of ASME codes and standards or the ASME safety accreditation activity.

The medal was established in 1986 by the Council on Codes and Standards.

SAFETY CODES AND STANDARDS MEDALISTS

1987 Howard F. Silfin 2003 Albert J. Saxer 2004 Robert N. Rogers 1988 Oscar J. Fisher 1989 William J. Stuber 2005 David L. Steel 1990 Oswald S. Carliss 2006 Herschell E. Godwin, Jr. 1991 Clyde A. Cobb 2007 Norman C. Hargreaves 1992 Edward A. Donoghue 2008 Louis Bialy 1993 Robert L. Sevmour 2009 Michael C. Polagye 1994 James D. Schell 2010 James W. Coaker 1995 Zack R. McCain 2011 Daniel N. Wolff 2012 David Duerr 1996 Robert R. Reisinger 1997 George W. Gibson 2013 Andrew P. Juhasz 1998 George R. Strakosch 2014 Robert Bolen 2000 William H. Axtman 2015 Bradley D. Closson 2001 Andrew R. Toth 2016 Michael Mills 2002 Paul S. Zorich 2017 David McColl

2018 James E. Richardson 2019 Martin P. Schroeder

SAVIO L-Y. WOO TRANSLATIONAL BIOMECHANICS MEDAL

The Savio L-Y. Woo Translational Biomechanics Medal is bestowed upon an individual who has translated meritorious bioengineering science to clinical practice through research, education, professional development, and with service to the bioengineering community. Examples of meritorious activity might be basic bioengineering science that translates into a medical device or equipment, contributes to new approaches of disease treatment, establishes new injury treatment modalities, etc.

The award was established in 2015 by the Bioengineering Division.

SAVIO L-Y. WOO TRANSLANTIONAL BIOMECHANICS MEDALISTS

2016 B. Barry Lieber 2017 Arthur Erdman 2018 Kyriacos A. Athanasiou 2019 Rita M. Patterson

SIA NEMAT-NASSER EARLY CAREER AWARD

The Sia Nemat-Nasser Early Career Award is given by the Materials Division of ASME in honor of Dr. Sia Nemat-Nasser to recognize early career research excellence in the areas of experimental, computational, and theoretical mechanics and materials by young investigators who are within 10 years after their Ph.D. degree, with special emphasis placed on underrepresented groups.

SIA NEMAT-NASSER EARLY CAREER AWARD RECIPIENTS

2012 Harold S. Park
2013 Thao D. Nguyen
 Ting Zhu
2014 Kevin T. Turner
2015 Yong Zhu
2016 Lijie G. Zhang
2017 Yashashree Kulkarni

2018 Tak-Sing Wong Yihui Zhang 2019 Sinan Keten

SOICHRIO HONDA MEDAL

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

Attention shall be concentrated on the brilliance of the achievement or on the overall effect of a series of contributions—not on the individual. The achievement should be of such public importance as to be worthy of the gratitude of the nation and to call forth the admiration of engineers.

No restrictions shall arise out of the nominee's age, nationality, society, membership, degree of education, employment, or official position.

As a result of a generous unrestricted donation to ASME by Honda Motor Company, Ltd., in 1980, the Society established the Soichiro Honda Medal in recognition of Mr. Honda's exemplary achievements in the field of personal transportation in 1982. This medal is the first to recognize achievements in this field.

SOICHRIO HONDA MEDALISTS

1984 John P. Stapp	2002 John H. Johnson	2018 Ashwani K. Gupta
1985 Shoichi Furuhama	2003 Robert F. Sawyer	2019 Masayoshi Tomizuka
1986 Lloyd L. Withrow	2004 Rolf D. Reitz	
1987 Felix Wankel	2005 Barry J. Cooper	
1988 Arthur F. McLean	2006 David E. Foster	
1989 Shunichi Ohigashi	2007 Wallace R. Wade	
1990 Charles M. Heinen	2008 Robin Stuart Sharp	
1991 Hans C. List	2009 David F. Merrion	
1992 Hiroyuki Hiroyasu	2010 Thomas W. Asmus	
1993 Phillip S. Myers	2011 John J. Mooney	
1994 James Ellis Hall	2012 Priyaranjan Prasad	
1995 Joseph M. Juran	2013 John C. Wall	
1996 Karl J. Springer	2014 Thomas Morel	
1997 Jack D. Benson	2015 Thomas D. Gillespie	
1999 John B. Heywood	2016 Bahram Khalighi	
2000 Franz F. Pischinger	2017 John E. Dec	
2001 Robert C. Stempel		

SPIRIT OF ST. LOUIS MEDAL

The Spirit of St. Louis Medal is awarded for meritorious service in the advancement of aeronautics and astronautics. The award is not limited to members of ASME or the engineering profession.

The medal was established in 1929 by Philip D. Ball, ASME members, and Citizens of St. Louis, Missouri.

SPIRIT OF ST. LOUIS MEDALISTS

SI IKIT OF SI. EQUIS MEDALISTS						
1929 Daniel Guggenheim	1968 George S. Moore	1988 Edward H. Heinemann	2013 David A. Peters			
1932 Paul Litchfield	1969 G. Merritt Preston	1990 Charles Feltz	2015 Dewey H. Hodges			
1935 Will Rogers (posthumously)	1970 Clarence L. Johnson	1992 Holt Ashley	2016 Inderjit Chopra			
1938 James H. Doolittle	1971 Ralph L. Creel	1993 Charles F. Tiffany	2017 Charbel Farhat			
1941 John E. Younger	1972 Neil A. Armstrong	1994 Ben R. Rich	2018 Stephen P. Engelstad			
1944 George W. Lewis	1973 John F. Yardley	1995 Antony Jameson	2019 Kevin G. Bowcutt			
1947 John E. Northrup	1974 Abe Silverstein	1996 Robert G. Loewy				
1950 Reinout P. Kroon	1977 George D. McLean	1997 John W. Lincoln				
1954 Arthur E. Raymond 1978 Paul B. MacCready		1998 Charles H. Kaman				
1955 Ralph S. Damon 1979 Sir Freddie Laker		2000 John C. Houbolt				
1958 George S. Schairer 1980 Michael Collins		2001 Sheila E. Widnall				
1961 Samuel K. Hoffman	1981 Edgar M. Cortright, Jr 1982	2002 Thomas J. Kelly				
1962 Robert H. Widmer Frank N. Piasecki		2003 Peretz P. Friedmann				
1963 Frederick C. Crawford	1984 Charles S. Draper	2005 Robert H. Liebeck				
1964 Robert R. Gilruth	1985 Kurt H. Hohenemser	2007 Earl H. Dowell				
1965 William H. Pickering	1983 John W. Young	2009 Paul Bevilaqua				
1966 Christopher C. Kraft, Jr.	1986 Bruce McCandless II	2011 Abraham Karem				
1967 Ira G. Hedrick	1987 Elbert L. Rutan	2012 William M. Shepherd				

THOMAS A. EDISON PATENT AWARD

The Thomas A. Edison Patent Award was established in 1997 to recognize achievement in the form of a patented device or process which has the potential to significantly enhance some aspect of mechanical engineering. The award was funded through the efforts of the Board on Research and Technology Development.

To be eligible, the patent must have been registered in the United States and the device or process must have significant potential impact on some aspect of mechanical engineering. Although not a requirement of this award, it is preferable that the nominee(s) be a member(s) of ASME. The award shall be presented at the following ASME Congress.

THOMAS A. EDISON PATENT AWARD RECIPIENTS

2000 Herman H. Viegas
2001 Alexander M. Gorlov
2002 Hooshang Heshmat
2003 John N. Basic, Sr.
2004 Faydor L. Litvin
2005 Ching-Pang Lee
2006 Charles A. Garris
2007 Norman R. McCombs
2008 Kyriacos A. Athanasiou
2009 Alex J. Severinsky
2010 Jyotirmoy Mazumder
2012 Vipin Kumar
2013 Moshe Shoham
2015 Andy Walker

TIMOSHENKO MEDAL

The Timoshenko Medal is bestowed in recognition of distinguished contributions to applied mechanics, without restrictions to nationality or profession.

To honor Stephen P. Timoshenko and to commemorate his contribution to applied mechanics as author and teacher, the ASME Applied Mechanics Division established the medal in 1957.

TIMOSHENKO MEDALISTS

1957 Stephen P. Timoshenko 1985 Eli Sternberg 1986 George R. Irwin 1958 Arpad L. Nadai 1987 Ronald S. Rivlin Sir Geoffrey Taylor Theodore von Karman 1988 George K. Batchelor 1959 Sir Richard Southwell 1989 Bernard Budiansky 1960 Cornelius B. Biezano 1990 Stephen H. Crandall Richard Grammel 1991 Yuan-Cheng B. Fung 1961 James N. Goodier 1992 Jan D. Achenbach 1962 Maurice A. Biot 1993 John L. Lumley 1963 Michael James Lighthill 1994 James R. Rice 1964 Raymond D. Mindlin 1995 Daniel D. Joseph 1965 Sydney Goldstein 1996 J. Tinsley Oden 1966 William Prager 1997 John R. Willis 1967 Hillel Poritsky 1998 Olgierd C. Zienkiewicz 1968 Warner T. Koiter 1999 Anatol Roshko 1969 Jakob Ackeret 2000 Rodney J. Clifton 1970 James J. Stoker 2001 Ted Belytschko 1971 Howard W. Emmons 2002 John W. Hutchinson 1972 Jacob P. Den Hartog 2003 Lambert B. Freund 2004 Morton E. Gurtin 1973 Eric Reissner 1974 Albert E. Green 2005 Grigory Isaakovich 1975 Chia-Chiao Lin Barenblatt 1976 Erastus H. Lee 2006 Kenneth L. Johnson 2007 Thomas J.R. Hughes 1977 John D. Eshelby 1978 George F. Carrier 2008 Sia Nemat-Nasser 1979 Jerald L. Ericksen 2009 Zděnek P. Bažant 1980 Paul M. Naghdi 2010 Wolfgang Knauss 1981 John H. Argyris 2011 Alan Needleman 1982 John W. Miles 2012 Subra Suresh 1983 Daniel C. Drucker 2013 Richard M. Christensen 1984 Joseph B. Keller 2014 Robert M. McMeeking

2015 Michael Ortiz 2016 Ray Ogden 2017 Viggo Tvergaard 2018 Ares J. Rosakis 2019 Junuthula N. Reddy

VAN C. MOW MEDAL

The Van C. Mow Medal is bestowed upon an individual who has demonstrated meritorious contributions to the field of bioengineering through research, education, professional development, leadership in the development of the profession, mentorship to young bioengineers, and service to the bioengineering community.

The individual must have earned a Ph.D. or equivalent degree between 10 and 20 years prior to June 1 of the year of the award.

The award was established by the Bioengineering Division in 2004.

VAN C. MOW MEDALISTS

2005 Kyriacos A. Athanasiou	2010 Tony M. Keaveny	2015 Dawn M. Elliott
2006 Robert L. Sah	2011 David A. Vorp	2016 Beth A. Winkelstein
2007 Lori A. Setton	2012 John Bischof	2017 Richard R. Neptune
2008 Scott L. Delp	2013 Jeffrey A. Weiss	2018 Jeffrey W. Holmes
2009 Michael S. Sacks	2014 Christopher R. Jacobs	2019 Tony Jun Huang

WARNER T. KOITER MEDAL

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

The award was funded by the Technical University of Delft, Netherlands, to honor Warner T. Koiter for his foundational work in nonlinear stability of structures in the most general sense, for his diligence in the effective application of these theories, his international leadership in mechanics, and his effectiveness as a teacher and researcher.

WARNER T. KOITER MEDALISTS

1007 Warman T. Vaitan	2010 Niceles Trientsfullidie
1997 Warner T. Koiter	2010 Nicolas Triantafyllidis
1998 Viggo Tvergaard	2011 James G. Simmonds
1999 Charles R. Steele	2012 Erik Van der Giessen
2000 Giulio Maier	2013 Norman A. Fleck
2001 Wolfgang G. Knauss	2014 Guruswami Ravichandran
2002 James K. Knowles	2015 Kaushik Bhattacharya
2003 David R.J. Owen	2016 Pedro Ponte Castañeda
2004 Zenon Mroz	2017 Wei Yang
2005 Raymond W. Ogden	2018 Muhammed Taher A. Saif
2006 Pierre Suquet	2019 Kaliat T. Ramesh
2007 Chin-Teh Sun	

2008 Richard D. James 2009 Stelios Kyriakides

WILFRED C. LA ROCHELLE CONFORMITY ASSESSMENT AWARD

The Wilfred C. LaRochelle Conformity Assessment Award recognizes distinguished service in the area of Conformity Assessment, including but not limited to, the establishment, advancement and promotion of ASME's Product & Personnel Certification and Accreditation Programs.

The award was established in 2017 in memory of Wilfred C. LaRochelle.

WILFRED C. LA ROCHELLE CONFORMITY ASSESSMENT AWARD RECIPIENTS

2018 Robert V. Wielgoszinski 2019 Edgar A. Whittle

WILLIAM T. ENNOR MANUFACTURING TECHNOLOGY AWARD

The William T. Ennor Manufacturing Technology Award is presented to an individual or team of individuals for developing or contributing significantly to an innovative manufacturing technology, the implementation of which has resulted in substantial economic and/or societal benefits.

The award was established by the Production Engineering Division (now the Manufacturing Engineering Division) in conjunction with the Alcoa Company in 1990.

WILLIAM T. ENNOR MANUFACTURING AWARD RECIPIENTS

1991 Kuo K. Wang

1992 Bei Tse Chao

Kenneth J. Trigger

1993 Nam P. Suh

1995 C. Kumar N. Patel

1996 Charles W. Hull

1997 J. "George" Tlusty

1998 Taylan Altan

1999 Yoram Koren

2000 Inyong Ham

2001 Robert J. Hocken

2002 Ranga Komanduri

2003 Richard E. Devor

Shiv G. Kapoor

2004 Stephen Malkin

2006 Jyotirmoy Mazumder 2008 Chunghorng R. Liu

2009 Jun Ni

2010 David A. Dornfeld

2011 S.V. Sreenivasan

2012 S. Jack Hu

2013 John W. Sutherland 2014 Placid M. Ferreira

2015 Elijah Kannatey-Asibu Jr.

2016 Yusuf Altintas

2018 Scott Smith

2019 Steven J. Skerlos

Y.C. FUNG YOUNG EARLY CAREER AWARD

The Y.C. Fung Early Career Award was established to recognize young investigators who are committed to pursuing research in the field of Bioengineering and have demonstrated significant potential to make substantial contributions to the field of Bioengineering. Such accomplishments may take the form of, but are not limited to, design or development of new methods, equipment or instrumentation in bioengineering; and research publications in peer-reviewed journals.

The award was established by the Bioengineering Division in 1985 and operated as a division award until 1998, when it was elevated to a Society-level award. It was renamed the Y.C. Fung Early Career Award in 2017.

Y.C. FUNG EARLY CAREER AWARD RECIPIENTS

1999 Rebecca Richards-Kortum

2000 Farshid Guilak

2001 David F. Meaney

2002 Jeffrey A. Weiss

2003 Sangeeta N. Bhatia

2004 Richard E. Debski

2005 Jeffrey W. Holmes

2006 Beth A. Winkelstein

2007 Stavros Thomopoulos

2008 Gabriel A. Silva

2009 Robert L. Mauck

2010 Matthew J. Gounis

2011 Ali Khademhosseini 2012 Marissa N. Rylander

2013 Jonathan P. Vande Geest

2014 W. David Merryman 2015 Adam J. Engler 2016 Triantafyllos Stylianopoulos 2017 Kristin M. Myers 2018 Spencer P. Lake 2019 Grace O'Connell

YERAM S. TOULOUKIAN AWARD

The Yeram S. Touloukian Award, established in 1997, is bestowed triennially to recognize outstanding technical contributions in the field of thermophysical properties. An individual who is internationally recognized for major contributions in the thermophysical properties field is eligible to receive this award. Fields recognized by the award include, but are not limited to, mechanical engineering, chemical engineering, physics and chemistry.

Funding to support the award was provided by Purdue University to honor the contributions of Yeram Touloukian.

YERAM S. TOULOUKIAN AWARD RECIPIENTS

2000 Akira Nagashima 2003 Raymond E. Taylor Wolfgang Wagner 2006 Johanna Levelt Sengers 2009 Andreas Mandelis Koichi Watanabe 2012 Michael R. Moldover Peter T. Cummings 2015 Mikhail A. Anisimov David G. Cahill

2018 Alfred Leipertz Joern I. Siepmann

LITERATURE AWARDS

ARTHUR L. WILLISTON MEDAL

The Arthur L. Williston Medal is given for the best paper submitted in the annual competition on a subject chosen to challenge the engineering abilities of engineering students in conformance with the annual contest guidelines. A contestant must be an ASME Student Member or Member who received his or her baccalaureate degree not more than two years before the deadline date for submission of papers.

Arthur L. Williston, ASME Member, established the medal in 1954.

ARTHUR L. WILLISTON MEDALISTS – FIRST PLACE

1956 John A. Welsh 1957 Walter P. Logeman 1959 Rowe A. Girardini 1960 Marc Fishbein 1961 James R. Stewart 1962 Charles H. Recht 1964 Kenneth E. Gawronski 1965 LaRoux K. Gillespie 1966 Eddie R. Howe 1967 L. Thomas Cooper III 1968 Frank A. Ralbovsky 1969 Arlo Fossum 1970 Steven H. Carlson 1971 James A. Willms 1972 Dennis L. Sandberg 1973 Frank H. Roubleau, Jr 1974 James J. Callas 1976 Enud David Laska 1977 Harry W. Groot 1978 Jitendra S. Goela 1979 Steven E. Stephens 1980 Charles S. Macaulay

1982 John H. Pilarski 1983 Max R. Casada 1984 Eddie E. Ferrer 1985 Henry M. Quillian III 1986 Stephen J. Schoonmaker 1987 Thomas C. Davis 1988 Brian T. Reisenauer 1989 Christian L. Struble 1990 Robert J. Stehlik 1991 Matt Pruszynski 1992 Sean L. Neilson 1993 Neil G. Whitbeck 1994 Michael J. Zinngrabe 1995 Daniel A. Fletcher 1996 Jeffrey M. Otto 1997 Laura R. Foster 1998 Darrick A. Dean 1999 Matthew E. Myers 2001 Amip Shah 2002 Anne M. Hines 2003 David L. Damm 2004 Marie H. Hoffman

2005 Valerie Stringer 2006 Tyler E. Schnug 2007 Michael Steel 2008 Raymond M. Meyer 2009 Michael Simmons 2010 Andrew Neal Rister 2011 Prabal Goyal 2012 Kyle C. Picha 2013 Cassandra N. Hawley 2014 Mavila M. Miller 2015 Matthew D. Hill 2016 Leong Ka Long Karen 2017 Austin P. Kraus 2018 Noah M. Purdy

SECOND PLACE

1988 Michael E. Kennedy 1989 David A. Walker 1990 Randall W. Meinert 1991 Kenneth Skoug III 1992 Gilroy S. Ames 1993 Wade LaGrenade 1994 Jeffrey Craig Morris 1995 Connie J. Bleidorn 1996 Che J. Barnes 1997 Kenneth P. Horne 1998 Elizabeth M. Mastal 1999 Donna L. Hall 2001 David. L. Damm 2002 Andrew E. Karl 2003 Scott A. Fisher 2004 Paul F. Tatum 2005 John O. Bolton 2006 Amanda M. Thomas 2007 Lori Michelle Neidig 2008 Walter S. Fredenhagen III 2009 Tessa Rae Nott 2010 Elizabeth Betterbed

2011 Nathaniel D. Taylor 2012 Daniel J. Hershman 2013 James P. Crawford 2014 Bernard K. Witschen 2015 Tara Larkin 2017 Joseph R.H. Schaadt

THIRD PLACE

1988 John Ellenz 1989 Deborah S. Schenberger 1990 John E. Davison 1991 Kathleen A. Conley 1992 Kingman Tang 1993 Daniel A. Fletcher 1994 John C. Schiffer 1995 Anthony T. Lomma 1996 Ookyong Kim 1997 Brian D. Myers 1998 Aaron Marsh 1999 Koh Boon Kiat 2001 Anne Hines 2003 Christopher L. Murphy 2004 Aashish Kalra 2006 Joy K. Adjorlolo 2007 Danielle Kimberly Williams 2008 Chris L. Cohoat 2009 Elizabeth Betterbed 2010 Andrew W. Corwell 2011 Jericho Paolo O. Rivera 2013 Lucas C. Poppe 2014 Uyanna Obinna

2015 Joseph R.H. Schaadt

BLACKALL MACHINE TOOL AND GAGE AWARD

The Blackall Machine Tool and Gage Award is given for the best current original paper or papers (not published elsewhere) which has/have been presented before ASME and/or published by ASME during the two calendar years immediately preceding the year of the award. The paper(s) should be clearly concerned with or related to the design or application of machine tools, gages, or dimensional measuring instruments. Papers by multiple authors are eligible.

Authors are not restricted by nationality, age, or society membership. The award shall be made annually, if warranted.

The award was established in 1954 by Frederick S. Blackall, Jr., Fellow and 72nd President of the Society.

BLACKALL MACHINE TOOL AND GAGE AWARD RECIPIENTS

1955 Carl J. Oxford, Jr. 1991 Eiji Usui Masami Masuko John A. Cook 1956 Orlan W. Boston Akihiko Hirota William W. Gilbert Takahiro Shirakashi 1957 Bei T. Chao Takeaki Kitagawa Kenneth J. Trigger 1992 Guangming Zhang Shiv G. Kapoor 1958 S.A. Tobias Wilfred Fishwick 1993 Changsheng Guo 1960 B. Popper Stephen Malkin David W. Pessen Fershid Engineer 1961 Joseph R. Roubik 1994 David A. Stephenson 1962 W.A. Mohn 1995 Jerzy Kozak Kamlakar P. Rajurkar 1963 E.G. Thomsen A.G. MacDonald Bin Wei 1965 Robert S. Hahn 1996 William R.D. Wilson 1967 J. Hopenfeld Tse-Chi Hsu R.R. Cole Xiubao Huang 1968 Kuo-King Wang 1997 William J. Endres Shien-Ming Wu Richard E. Devor Kazuaki Iwata Shiv G. Kapoor 1971 William P. Koster 1998 Shounak M. Athavale Louis J. Fritz John S. Strenkowski 1999 Jamal Sheikh-Ahmad 1974 S.P. Loutrel N.H. Cook John A. Bailey 1975 Sindre Holoyen 2000 Barney E. Klamecki 2001 Woncheol Choi C. Dan Mote, Jr. 1980 Robert A. Thompson Thomas R. Kurfess Subbiah Ramalingam 2002 Charalabos C. Doumanidis John D. Watson Yong-Min Kwak 2003 Ihab Hanna 1981 Ranga Komanduri Robert H. Brown Scott A. Hucker 1982 Nam P. Suh Robin Stevenson Bruce M. Kramer Guoxian Xiao 1983 Richard E. DeVor 2004 Jose M. Hurtado William A. Kline Shreyes N. Melkote Igbal A. Shareef 2005 Yong Huang 1984 Chunghorng R. Liu Steven Y. Liang Moshe M. Barash 2006 Y. Lawrence Yao 1985 Paul K. Wright I. Cevdet Noyan Wenwu Zhang 1986 David A. Dornfeld 2007 Yung C. Shin Elijah Kannatey-Asibu, Jr. 1988 Betzalel Avitzur Yinggang Tian 2008 Andrew E. Honegger Rensen Wii Samuel H. Talbert Shiv G. Kapoor Ye T. Chou Richard E. Devor 1989 Lucian Kops 2009 Robert J. Hocken M. Helmi Attia Jimmie A. Miller

> K. Scott Smith Bethany A. Woody

1990 Jiri Tlusty

2010 Dalong Gao Ugur Ersoy Robin Stevenson Pei-Chung Wang 2011 O. Burak Ozdoganlar Sinan Filiz 2012 Rui Zhou Jian Cao Kornel F. Ehmann Chun Xu 2013 Yusuf Altintas Caner Ekşioglu Zekai M. Kilic 2014 Mingyang Li Lie Tang Robert G. Landers Ming C. Leu 2017 Hai Trong Nguyen Hui Wang Bruce L. Tai Jie Ren S. Jack Hu Albert J. Shih 2018 Sripati Sah Numpon Mahayotsanun Michael Peshkin Jian Cao Robert X. Gao 2019 Burak Sencer Shingo Tajima

EDWARD F. OBERT AWARD

The Edward F. Obert Award is given for an outstanding paper on thermodynamics authored during the preceding two calendar years. The award shall be made for a paper presented at the Advanced Energy Systems Division's International Mechanical Engineering Congress symposium on energy systems analysis (so long as the symposium continues). The award shall be presented at the following ASME Congress.

The award was established in 1987 as a division award until 1995, when it was elevated to a Society award.

EDWARD F. OBERT AWARD RECIPIENTS

1997 Thomas P. Anderson 2007 Andrea Lazzaretto Andrea Toffolo 1998 Andrea Lazzaretto 2010 Noam Lior George Tsatsaronis 1999 Masaru Ishida Na Zhang Takahiro Suzuki 2012 Michael R. von Spakovsky Masashi Yamamoto Charles E. Smith 2000 Anthony J. Bowman 2014 Ghassan J. Nicolas Richard A. Gaggioli Mohammad Janbozorgi Hameed Metghalchi David Paulus, Jr. David H. Richardson 2016 Sara Cosentino 2001 Elias P. Gyftopoulos Adriano Sciacovelli 2002 Cristian Carraretto Vittorio Verda Alberto Mirandola 2017 Luca Rivadossi Anna Stoppato Gian P. Beretta 2003 Luis M. Serra 2018 Andrea Toffolo Antonio Valero Andrea Lazzaretto Vittorio Verda Sergio Rech 2004 Adrian Bejan 2019 John H. Lienhard V Sylvie Lorente

FREEMAN SCHOLAR AWARD

A person of wide experience in fluids engineering is selected as the Freeman Scholar. He or she is expected to review a coherent topic in his or her specialty, including a comprehensive statement of the state-of-the-art and to suggest key future research needs. The results will be presented at the International Mechanical Engineering Congress and published in the ASME *Journal of Fluids Engineering*. The recipient may be from industry, government, education or private professional practice. He or she need not be an ASME member. The Freeman Scholar Program was supported by the ASME Freeman Fund in 1926 by John R. Freeman, noted Hydraulic Engineer and Scholar, Honorary Member, and 24th President of ASME. Mr. Freeman suggested a flexible program for utilization of the funds. In early years, it supplied fellowships for the study of hydraulic laboratory practice in Europe; later, it supported publication of important hydraulic research data and, more recently, it was granted to support research programs in hydraulics and fluid mechanics. The current Freeman Scholar Program in fluids engineering represents a timely usage of the Fund and is consistent with the intentions of the donor.

FREEMAN SCHOLAR AWARD RECIPIENTS

1971 Jack W. Hoyt 1992 William A. Sirignano Ronald F. Probstein 1994 David E. Stock 1974 Jack E. Cermak 1996 Kirti N. Ghia 1976 William J. McCroskey 1998 Mohamed Gad-el-Hak 1978 Benjamin Gebhart 2000 Yogesh Jaluria 1980 Edward M. Greitzer 2002 Efstathios E. Michaelides 1982 Simon Ostrach 2004 Gary S. Settles 1984 A.K.M. Fazle Hussain 2006 Promode R. Bandyopadhyay 1986 John B. Heywood 2008 William K. George Joseph C. Klewicki 1988 Turgut Sarpkaya 1990 Budugur Lakshminarayana 2010 Michael W. Reeks

2012 Pratap Vanka 2014 Steven L. Ceccio 2016 Goodarz Ahmadi 2017 S. Balachandar 2018 Ramesh K. Agarwal 2019 Upendra S. Rohatgi

GAS TURBINE AWARD

The Gas Turbine Award is given in recognition of an outstanding individual- or multiple-author contribution to the literature of combustion gas turbines or gas turbines thermally combined with nuclear or steam power plants. The paper may be devoted to design aspects or overall gas turbines or individual components and/or systems, such as compressors, combustion systems, turbines, controls and accessories, bearings, regenerators, inlet air filters, silencers, etc. It may cover topics specifically related to gas turbines, such as high temperature materials or fuel considerations, including erosion and corrosion complications. It can also be devoted to application or operational aspects of gas turbines for aircraft propulsion and ground power units, or automotive, electric utility, gas pipeline pumping, locomotive, marine, oil field pumping, petrochemical, space power, steel, and similar uses. Papers published anywhere in the world are eligible. Authors are not restricted by nationality, age, profession, or membership in any engineering society or other organization. The award is made annually, if warranted, at the Annual Conference of the International Gas Turbine Institute.

The Gas Turbine Division (now International Gas Turbine Institute) established the award in 1963.

GAS TURBINE AWARD RECIPIENTS

1964 A	Alexander L. London	1992	S.R. Manwaring	2007	Timothy Rice
1965 J	.S. Alford		David C. Wisler		David Bell
1966 F	Franklin O. Carta	1993	Joel M. Haynes		Gurnam Singh
1967 A	Arthur D. Bernstein		Gavin J. Hendricks	2008	Ronald S. Bunker
V	William H. Heiser		Alan H. Epstein	2009	Budimir Rosic
(Charles M. Hevenor	1994	Edward M. Greitzer		Eric M. Curtis
1968 C	O.E. Balje		Daniel L. Gysling		John D. Denton
1969 C	Carlyle Reid	1995	Bruce P. Biederman		John P. Longley
1970 J	.L. Kerrebrock		Craig J. Fischberg	2010	Martin N. Goodhand
Α	Alojzy.A. Mikolajczak		Aaron J. Gleixner		Robert J. Miller
1971 D	. Marchant		Charles R. LeJambre	2011	Christian Eichler
Н	Iarold A. Harmon		Chae M. Rhie		Georg Baumgartner
A	Alojzy.A. Mikolajczak		David A. Spear		Thomas Sattelmayer
1972 F	F.B. Metzger		Chad J. Yetka	2012	Graham Pullan
Ι	D.B. Hanson		Robert M. Zacharias		Anna M. Young
1973 J	ohn Moore	1996	Franz Joos		Ivor J. Day
1974 C	G.L. Commerford		Philipp Brunner		Edward M. Greitzer
I	Lynn E. Snyder		Burkhard Schulte-Werning		Zoltan S. Spakovszky
1975 E	Edward M. Greitzer		Khawar Syed	2013	Harika S. Kahveci
1976 J	.P. Gostelow		Adnan Eroglu		Kevin R. Kirtley
1977 I	vor J. Day	1997	T.R. Camp	2014	Robert P. Grewe
N	Nicholas A. Cumpsty		Ivor J. Day		Robert J. Miller
E	Edward M. Greitzer		Robert E. Kielb		Howard P. Hodson
1978 F	Frank J. Wiesner		Josef Panovsky	2015	Ho-On To
1979 A	Arthur Schaffler	1999	Robert C. Steele		Robert J. Miller
1980 N	Mark S. Darlow		Luke H. Cowell	2017	Ho-On To
A	Anthony J. Smalley		Steven M. Cannon		Robert J. Miller
Α	Alexander G. Parkinson		Clifford E. Smith	2018	Svilen Savov
	G. Gordon Adkins, Jr.	2000	Thomas Sattelmayer		Nicholas Atkins
I	Leroy H. Smith, Jr.	2001	Frank Hummel		Sumiu Uchida
1982 k	K.V.L. Rao	2002	Ammar A. Al-Nahwi	2019	Christoph Brandstetter
Α	Arthur H. Lefebvre		Samir A. Nayfeh		Heinz-Peter Schiffer
1983 Cl	hunill Hah		James D. Paduano		Maximilian Jüngst
	oward P. Hodson		Lance L. Smith		
1985 I	Denis J. Doorley		Hasan Karim		
N	Aartin L.G. Oldfield		Marco J. Castaldi		
	Simon J. Gallimore		Shahrokh Etemad		
	Nicholas A. Cumpsty		William C. Pfefferle		
	Leroy H. Smith, Jr.		Vivek K. Khanna		
	Roger L. Davis		Kenneth O. Smith		
	David E. Hobbs		Ivor J. Day		
	Harris D. Weingold		Christopher Freeman		
	oel H. Wagner		Thomas Scarinci		
	Bruce V. Johnson		Ivor J. Day		
	Гhomas J. Hajek		Christopher Freeman		
	ames H. Leylek		John C. Williams		
Ι	David C. Wisler	2006	Budimir Rosic		

John Douglas Denton

1991 Ivor J. Day

HENRY HESS EARLY CAREER PUBLICATION AWARD

The Henry Hess Early Career Publication Award is given for an original technical paper presented to or accepted for publication by the Society at least two calendar years prior to the year of award by a Student Member or Member who was not yet 35 years of age at the time the paper was submitted to the Society. Joint authorship is permissible, provided all authors meet the requirements.

The paper shall be specifically recommended for the award by a review committee or qualified individual.

The award was established as the Junior Award in 1914 by Henry Hess, Member and Vice President of the Society. In 1964 and 2016, respectively, the name was changed to the Henry Hess Award and Henry Hess Early Career Publication Award.

HENRY HESS EARLY CAREER PUBLICATION AWARD RECIPIENTS

1915 Ernest Hickstein 1916 L.B. McMillan 1919 E.D. Whalen 1921 S. Logan Kerr 1922 R.H. Heilman F.L. Kallam 1923 S.S. Sanford S. Crocker 1924 R.H. Heilman 1925 Gilbert Schaller 1927 William M. Frame 1928 M.D. Aisenstein 1929 Arthur M. Wahl 1930 Ed S. Smith, Jr. 1931 Montrose Drewry 1932 Edmund M. Wagner 1933 Townsend Tinker 1934 John Yellott, Jr. 1935 Stanley Mikiwa

1936 H.F. Mullikin, Jr.

1937 Leslie J. Hooper 1938 Arthur C. Stern 1940 Robert E. Newton 1941 John Rettaliata 1942 Winston M. Dudley 1943 Troels Warming 1945 Bruce Del Mar 1946 Martin Goland 1947 Gilbert T. Rowe 1948 Hunt Davis 1949 Gerhard Nothmann 1951 John D. Stantz 1952 Warren Rohsenow 1955 F. Freudenstein 1959 Victor Salesmann 1960 Gunnar Heskestad Duane Olberts 1961 J.E. Fleckenstein 1962 Miklos Sajben 1963 A. Thiruvengadam 1964 R.J. McGrattan 1965 J.F. Booker 1966 Jerry R. Johanson 1967 Richard E. Barrett 1969 James R. Rice 1970 T.L. Geers 1972 D.C. Gakenheimer 1973 Hazem A. Ezzat Steve M. Rohde

1974 Lambert B. Freund 1976 G.D. Gupta 1977 Robert J. Hannemann 1978 Maria Comninou 1979 Krishna C. Gupta 1980 Bharat Bhushan 1984 Richard C. Benson 1986 Steven W. Shaw 1988 David L. McDowell 1990 Stephen E. Bechtel 1992 Jeffrey S. Marshall 1993 Mark T. Hanson 1995 J. Edward Colgate 2018 Mary H. Foltz Craig C. Kage Casey P. Johnson Arin M. Ellingson 2019 Grace D. O'Connell Benjamin Werbner Minhao Zhou

MELVILLE MEDAL

The Melville Medal is the highest ASME honor for the best original paper (not published elsewhere) that has been published in the ASME Transactions during the two calendar years immediately preceding the year of the award. The paper may have more than one author, but one of the authors shall be an ASME corporate member (Fellow or Member). The paper shall be specifically recommended for the medal by a review committee or qualified individual.

The Melville Medal may also be awarded for a paper that has been selected for some other best paper award in the Society. Thus, papers selected for special awards (Blackall, Prime Movers, Gas Turbine, or Rail Transportation) or for best paper awards of professional Divisions, Sections, or other ASME bodies may be considered for the Melville Medal, if specifically recommended by the committee responsible for the award.

First awarded in 1927, the Melville Medal is by the 1914 bequest of Admiral George W. Melville, Honorary Member and 18th President of the Society.

MELVILLE MEDALISTS

1927	Leon P. Alford	1976	Bernard J. Hamrock	1994	Yuan-Cheng B. Fung
1929	Joseph W. Roe		Duncan Dowson		Shu Qian Liu
1930	Herman Diederichs	1977	Eugene F. Fichter	1995	Flaura K. Winston
	William Pomeroy		Kenneth H. Hunt		Lawrence L. Thibault
1931	Arthur Grunert	1978	D.E. Negrelli		Edward J. Macarak
1932	Alexey Stepanoff		J.R. Lloyd	1996	Yaqi Huang
	William Caldwell		J.L. Novotny		David S. Rumschitzki
1935	Oscar R. Wikander	1979	Thomas J.R. Hughes		Shu Chien
1936	H.A.S. Howarth		W.K. Liu		Sheldon Weinbaum
1937	Alfred J. Buchi	1980	Ravi Chandran	1997	Michael D. Buschmann
1938	Alphonse Lipetz		John C. Chen		Alan J. Grodzinsky
1939	Lester Goldsmith		Fred W. Staub	1998	David E. Halstead
1940	Carl A.W. Brandt	1981	Kyung-Suk Kim		David C. Wisler
1941	Roger V. Terry		Rodney J. Clifton		Theodore H. Okiishi
	Kenneth Salisbury	1982	Van C. Mow		Gregory J. Walker
1944	Ernest Robinson		Steve C. Kuei		Howard P. Hodson
1945	William J. King		W. Michael Lai		Hyoun-Woo Shin
1946	Troels Warming		Cecil G. Armstrong	1999	Aspi R. Wadia
1947	Raymond Martinelli	1983	Albert M.C. Chan		Peter N. Szucs
1948	Reginald Gillmor		Sanjoy Banerjee		David W. Crall
1950	Samuel J. Loring	1984	Michael F. Blair	2001	Robert E. Kielb
1951	Clayton Barnard	1985	Lung-Wen Tsai		Josef Panovsky
1952	Neil P. Bailey		Alexander P. Morgan		David C. Wisler
1953	Jefferson Falkner	1986	Robert W. Bjorge	2003	Brent F. Beacher
1954	Edmund Sylvester		Peter Griffith		Fredric F. Ehrich
1955	Robert T. Knapp	1987	Dennis L. Siebers		Zoltan S. Spakovszky
	Thomas P. Goodman		Robert J. Moffatt		Manuel Martinez-
1959	Stephen J. Kline		Richard G. Schwind		Sanchez
1960	William G. Steltz	1988	Theodore L. Bergman	Н	youn-Woo Shin
1961	Otto Erich Balje		Frank P. Incropera		Seung Jin Song
	T.P. Goodman		Raymond Viskanta		Albert F. Storace
1963	J.S. Ausman	1989	David C. Wisler		David C. Wisler
	J.K. Jakobsen		Randall C. Bauer	2004	Peng Zhang
	W.A. Van Der Sluys		Theodore H. Okiishi		Yonggang Huang
	Bernard Roth	1990	Cheng Dong		Huajian Gao
	Yian-Nian Chen		Richard Skalak		Keh-Chih Hwang
	Leon R. Glicksman		Kuo-Li Paul Sung	2006	Raj M. Manglik
1970	J. William Holl		G.W. Schmid-		Juntao Zhang
	A.L. Kornhauser		Schoenbein	2009	James Armor
	Thomas Slot		Shu Chien		Paul Cantin
1972	H.W. O'Connor	1991	Akira Sakurai		David Christensen
	A.S. Weinstein		Masahiro Shiotsu		Manuj Dhingra
1974	V.H. Arakeri		Koichi Hata		David Gutz
	Allan J. Acosta	1992	Arunava Majumdar		Yedidia Neumeier
1975	David M. Sanborn		Bharat Bhushan		J.V.R. Prasad
	A.V. Turchina	1993	Stephen C. Cowin		Peter N. Szucs
	Ward O. Winer		Ali M. Sadegh		Aspi R. Wadia

G. M. Luo

2013 Ashwani K. Gupta
Ahmed E.E. Khalil
Kenneth M. Bryden
Sang Chun Lee
2015 Parnia Mohammadi
Liping Liu
Pradeep Sharma
2016 Xianbo Liu
Nicholas Vlajic
Xinhua Long
Guang Meng
Balakumar Balachandran
2017 Qiang Ma
Yihui Zhang

PRIME MOVERS COMMITTEE AWARD

The Prime Movers Committee Award recognizes outstanding contributions to the literature of thermal electric station practice or equipment that are available through public presentation and publication. Those papers approved by the appropriate papers review committees as meeting ASME standards and available in printed form may be considered for this award. Papers, while usually current, need not necessarily be so, and may be by a single author or multiple authors. Authors are not restricted by nationality, age, profession, or membership in any engineering society or other organization. The award is to be made annually, if warranted.

The Prime Movers Committee of the Edison Electric Institute established the award in 1954.

PRIME MOVERS COMMITTEE AWARD RECIPIENTS

1955 Louis Elliot 1977 M. Araoka Walter F. Friend J.D. Fox Edward C. Duffy H. Haneda Gustaf A. Gaffert K. Setoguchi Fred W. Argue W.F. Siddall Bernhardt G.A. Skrotski 1979 Henry E. Lokay Robert B. Donworth D.G. Rame Walter J. Lyman W.R. Brosev T. Harry Mandil 1980 Heinz E. Termuehlen Nunzio J. Palladino 1981 Bezalel Bornstein 1956 Milton Shaw Kenneth C. Cotton 1982 Eric Raask John W. Simpson 1957 Henrich Hegetschweller 1983 Paul G. Albert Robert L. Bartlett William J. Sumner 1958 Vivian F. Estcourt 1984 Kenneth C. Cotton 1959 J. Kenneth Salisbury Harris S. Shafer 1960 Sigmlkund N. Fiala Thomas H. McCloskev James N. Harlow Robert H. Boettcher 1985 David H. Cooke 1961 Charles Strohmeyer, Jr. 1963 E.F. Walsh 1986 William J. Sumner R.L. Jackson James H. Vogan R.E. Warner Robert J. Lindinge 1964 Everett P. Partridge 1987 Peter Schofield 1965 A.E. Weller David A. Lantzy 1988 Heinrich Oeynhausen W.T. Reid 1966 F.J. Hanzalek Gerhard Roettger P.G. Ipsen Jurgen Ewald 1967 Homer F. Hatfield Kurt Schleithoff Mark G. Pfeiffer Heinz. E. Termuehlen Charles B. Wurtz 1990 Rick Blomgren 1968 G.N. Stone Thomas G. Ebben A. J. Clark Imdad Imam John R. Scheibel 1969 Paul Goldstein Charles L. Burton 1992 John B. Kitto, Jr. 1970 Paul Leung James S. Klug Steven A. Bryk Raymond E. Moore 1993 Michael F. Link 1971 Paul Leung Raymond E. Moore Erich Winschuh 1972 G.S. Liao Karl-Heinz Winterberg Paul Leung Arne Mattis 1994 Rattan K. Tawney 1973 D.W. Rahoi R.C. Scarberry Ram G. Narula J.R. Crum Michael J. Boswell P.E. Morris Fabrizio DeCandia 1974 Bezalel Bornstein 1997 Thomas H. McCloskey Michael A. Pollard Paul Leung 1975 Karl A. Gulbrand John N. Schimmels

Paul Leung 1976 Hans-Gunter Haddenhorst

Wolfgang Mattick

Z. Stanley Stys Otto Weber 2000 David B. Smith

2001 Marco Gambini Michela Vellini

David A. Mauney

2005 Fred D. Lang Loren E. Mayer Dave A.T. Rodgers 2007 Thomas Reis Dani Fadda Mark A. Buzanowski 2008 La Ronda Bowen Allen Dusault Ruth MacDougall Heidi Ochsner George Simons 2009 Robert Brandt Jr. 2010 Antonio Diego-Marin Carlos Melendez-Cervantes Angel A. Mendez-Aranda Armando Giles-Alarcon 2011 William H. Kirkenir David Earley 2012 Luther M. Raatikka 2013 Arun Puri John DiBiase 2014 Robert J. Bell Albert S. Birks 2016 Weizhong Feng 2017 Darren M. Nightingale

WORCESTER REED WARNER MEDAL

The Worcester Reed Warner Medal is awarded to an individual for outstanding contribution to the permanent literature of engineering. Contributions may be single papers, treatises or books, or a series of papers. They are to deal with progressive ideas relative to engineering, scientific, and industrial research associated with mechanical engineering; the design and operation of mechanical and associated equipment; industrial engineering or management, organization, operation, and the concomitants of each; or other subjects closely associated with the foregoing. To qualify as having permanent value, any paper or treatise should not be less than five years old. Recipients may be non-members of the Society.

Worcester Reed Warner, Charter Member and 16th President of the Society, established the medal by bequest in 1930.

WORCESTER REED WARNER MEDALISTS

1933 Dexter S Kimball 1934 Ralph E. Flanders 1935 Stephen P. Timoshenko 1936 Charles M. Allen 1937 Clarence Hirshfeld 1938 Lawford H. Fry 1939 Rupen Eksergian 1940 William Gregory 1941 Richard Southwell 1942 Fred H. Colvin 1943 Igor I. Sikorsky 1944 Earle Buckingham 1945 Joseph M. Juran 1947 Arpad L. Nadai 1948 Edward S. Cole 1949 Fred B. Seelv 1950 Orlan W. Boston 1951 Jacob P. Den Hartog 1952 Max Jacob 1953 William McAdams 1954 Joseph Keenan 1955 Howard S. Bean 1956 J. Keith Louden 1957 William Prager 1958 Harold J. Rose

1959 Daniel Glasstone 1960 Lloyd H. Donnell 1961 C.L.W. Trinks 1962 Virgil M. Faires 1963 Frederick Morse 1964 Oscar J. Horger 1965 Ascher H. Shapiro 1966 Eric A. Farber 1967 Nicholas J. Hoff 1968 Merhyle F. Spotts 1969 Hans W. Liepmann 1970 Wilhelm Flugge 1971 Stephen H. Crandall 1972 Burgess H. Jennings 1973 Max Mark Frocht 1978 James H. Potter

1974 Victor L. Streeter 1975 Philip G. Hodge, Jr 1976 Dennis G. Shepherd 1977 Joseph E. Shigley

1979 Darle W. Dudley

1980 Olgierd C. Zienkiewicz

1981 Frank Kreith 1982 Herbert Kolsky

1983 Allan D. Kraus

1984 Yuan-Cheng Fung

1985 Richard H. Gallagher

1987 Jack P. Holman 1988 Richard M. Christensen 1989 Lawrence E. Malvern 1990 J. Tinsley Oden 1991 Bruno A. Boley 1992 Junuthula N. Reddy 1993 Frank J. Rizzo 1994 George Springer 1995 Frank P. Incropera 1996 Adrian Bejan 1997 Zdenek P. Bazant 1998 Thomas J.R. Hughes 1999 Yogesh Jaluria 2000 Avram Bar-Cohen 2001 Budugur Lakshminarayana

1986 Ephraim M. Sparrow

2002 Tsu-Wei Chou 2004 Ephraim Suhir 2006 James G. Simmonds 2007 Portonovo S. Ayyaswamy 2008 Ashwani K. Gupta 2009 David G. Lilley 2012 János M. Beér 2013 Singiresu S. Rao 2014 Vigor Yang 2015 John H. Lau 2016 Isaac Elishakoff 2017 Michael P. Païdoussis 2018 Martin Ostoja-Starzewski 2019 Arun R. Srinivasa

SERVICE AWARDS

DEDICATED SERVICE AWARD

In 1983, the ASME Board of Governors approved the establishment of the Dedicated Service Award. It honors unusual dedicated voluntary service to the Society marked by outstanding performance, demonstrated effective leadership, prolonged and committed service, devotion, enthusiasm and faithfulness.

The award may be presented to selected individuals who have served the Society for at least ten years in one or more of the following areas: Standards and Certification, Public Affairs and Outreach, Knowledge and Community, Board of Governors, Student and Early Career Development, Institutes, ASME Foundation, and The ASME Auxiliary, Inc. No more than 81 awards will be presented annually. A listing of the DSA recipients can be found at: http://www.asme.org/about-asme/honors-awards/service-awards/dedicated-service-awards.

OUTSTANDING STUDENT SECTION ADVISOR AWARD

The Outstanding Student Section Advisor Award (previously the Student Section Advisor Award) is presented to an ASME corporate member (Fellow or Member) who is a current or former outstanding Student Section Advisor and whose leadership and service qualities have contributed, for a period of at least three years, to the program and operations of a Student Section of the Society.

A nomination for this award is expected to substantiate the leadership and service qualities of the nominee by reference to accomplishments in at least the following areas: (a) encouraging engineering students to become Student Members as the initial step in their program of professional development, (b) ensuring that the activities and programs of the Student Section stimulate interest in the profession, and (c) creating a professional awareness in the Student Members that inspires them to upgrade to Member before graduation and to maintain a continuous active membership in ASME.

The award was established in 1990 as the Faculty Advisor Award in a dual effort by the Committee on Honors and the Council on Member Affairs to bring recognition to the Student Section Advisors for their contributions to perpetuating ASME. In 2000 and 2014, the award was renamed the Student Section Advisor Award and the Outstanding Student Section Advisor Award, respectively. Funding for this award was provided by the Old Guard Committee of ASME. In addition, Lynden Davis, Vice President of Region IX, made a generous contribution to enhance the recognition given to all nominees who fulfill eligibility requirements. These nominees receive a plaque, certificate, and a \$500 honorarium.

OUTSTANDING STUDENT SECTION ADVISOR AWARD RECIPIENTS

San Diego State University

1))L Richard H. I Itz	Buil Diego Buile Chivelisity
1993 Muthukrishnan.	Clarkson University
Sathyamoorthy	
1994 Paul C. Lam	University of Akron
1995 Charles F. Reinholtz	Virginia Polytechnic Institute
1996 Richard R. Johnson	North Carolina State University
1997 Latif Jiji	City College of New York
1998 Chittaranjan Sahay	State University of New York at
	Binghamton
1999 Shirley T. Fleischmann	Grand Valley State University
2000 Kenneth L. Gentili	Tacoma Community College
2001 Abel Hernandez-Guerrero	University of Guanajuato at
	Salamanca
2002 Massimo Capobianchi	Gonzaga University
2003 Ghatu Subhash	Michigan Technological
	University
2004 Beth Ann Todd	University of Alabama
2005 Lanier S. Cauley	University of South Alabama
2006 Debendra K. Das	University of Alaska Fairbanks
2007 Ronald S. Adrezin	University of Hartford
2008 James P. O'Leary	Tufts University
2009 Timothy C. Scott	University of Virginia

1992 Richard A. Fitz

2010 Zbigniew M. Bzymek	University of Connecticut
2011 Jay M. Samuel	University of Wisconsin-Madison
2012 Rick J. Couvillion	University of Arkansas
2013 A. Richard Merz	Lafayette College
2014 Antonios Kontsos	Drexel University
2015 Selin Arslan	Lawrence Technological
	University
2016 Kok-Keung Lo	The Hong Kong Polytechnic
	University
2017 Nadir Yilmaz	Howard University
2019 Mohammad Mahinfalah	Milwaukee School of Engineering

SECTION III

JOINT AWARDS

ASME members may be eligible and qualified to receive various other engineering awards. These awards may be classified as being for specific or general engineering achievements. A listing of the two types are given in Tables 3A and 3B on pages 58 and 59, respectively.

Nomination procedures for the joint awards are quite varied. For the six awards listed below, ASME nominates one engineer who will generally be in competition with those submitted by other societies:

National Medal of Science (Annual): Submit nomination directly to ASME by March 1 of the year preceding the award.

James Watt International Medal (Biennial): Submit nomination directly to ASME by March 1 of an evennumbered year for award the following odd-numbered year.

Alfred Noble Prize (Annual): Submit nomination to Honors and Awards Committee of appropriate Technical Division. Nomination from this committee must be received by October 1 of the year preceding the award.

Joan Hodges Queneau Award (Annual): Submit nomination to Honors and Awards Committee of the Technology and Society Division. Same deadlines as for the Noble Prize.

Kelvin Gold Medal (Triennial): Submit nomination directly to ASME by October 1st of second year before award (i.e., October 1, 2006 for 2008 award, etc.).

Niels Bohr International Gold Medal (Triennial): Submit nomination directly to ASME by October 1 of second year before award (i.e., October 1, 2008 for 2010 award, etc.).

Nominations for all other awards may be submitted directly to the Joint Award Board which administers the particular award.

Members or committees may obtain a more complete description of any particular Joint Award upon request to the Honors Department, ASME Headquarters, Two Park Avenue, New York, NY 10016.

TABLE 3A

JOINT ENGINEERING AWARDS

(For Achievements in Special Fields)

Field	Honor and Founding Date	Qualifications	*Participating Bodies	*Administered By
Aeronautics	DANIEL GUGGENHEIM MEDAL (1928)	Contributions to the advancement of aeronautics	ASME, SAE, AIAA	AIAA
Atomic Energy	NIELS BOHR INTERNATIONAL GOLD MEDAL (1955)	Outstanding work by an engineer or physicist for the peaceful utilization of atomic energy		DI
Environmental Conservation	JOAN HODGES QUENEAU AWARD (1976)	Outstanding contribution by an engineer on behalf of environmental conservation		NAuS
Heat Transfer	MAX JAKOB MEMORIAL AWARD (1961)	Eminent achievement in heat transfer	ASME, AIChE	ASME
Invention	NATIONAL INVENTORS HALL OF FAME (1973)	Outstanding U.S. patented invention		NIHF
Literature	ALFRED NOBLE PRIZE (1929)	Outstanding technical paper by an author under 31 years of age	ASME, ASCE, AIME, IEEE, WSE	ASCE
Solid Fuels	PERCY NICHOLLS AWARD (1942)	Notable scientific or industrial achievement in the field of solid fuels	ASME, AIME	ASME/AIME
Transportation	ELMER A. SPERRY AWARD (1955)	Contribution to the advancement of transportation by land, air or sea	ASME, IEEE, SNAME, SAE, AIAA	ASME

TABLE 3B

JOINT ENGINEERING AWARDS

(For General Engineering Achievements)

Honor and Founding Date	Qualifications	*Participating Bodies	*Administered By
HOOVER MEDAL (1930) Great, unselfish, non-technical services by an engineer to his fellow man AIChE		ASME	
JAMES WATT INTERNATIONAL MEDAL (1936)	Worldwide eminence in the application of science to the progress of mechanical engineering		IMechE
JOHN FRITZ MEDAL (1902)	Notable scientific or industrial achievement in any field of pure or applied science		AAES
KELVIN GOLD MEDAL (1920)	Distinguished service in the application of science to engineering		ICE
NATIONAL MEDAL OF SCIENCE (1959)	Outstanding contributions to knowledge in the physical, biological, mathematical, or engineering sciences		AAES
SOCIETY OF WOMEN ENGINEERS AWARD	Outstanding contribution by a woman in any field of engineering		SWE
WASHINGTON AWARD (1916)	Accomplishments which promote the happiness, comfort, and well-being of humanity	ASCE, AIME, ASME, IEEE, NSPE	WSE

*KEY FOR TABLES 3A AND 3B

AAES	American Association of Engineering Societies, 1801 Alexander Bell Drive, Reston VA 20191-4344			
AIAA	American Institute of Aeronautics & Astronautics, 1801 Alexander Bell Drive, Suite 500, Reston, VA 20191-4344			
AIChE	American Institute of Chemical Engineers, 120 Wall Street, 23rd Fl., NY, NY 10005-4020			
AIME	American Institute of Mining, Metallurgical, and Petroleum Engineers, 12000 East Adam Aircraft Circle, Englewood, CO 80112			
AMA	American Management Association, 1601 Broadway, New York, NY 10019			
ASCE	American Society of Civil Engineers, 1801 Alexander Bell Drive, Reston, VA 20191			
ASME	American Society of Mechanical Engineers, Two Park Avenue, New York, NY 10016			
IDA	The Danish Society of Engineers (IDA)			
ICE	Institution of Civil Engineers (Great Britain)			
IEEE	Institute of Electrical and Electronics Engineers, Three Park Avenue, 17th Fl. New York, NY 10016			
IMechE	Institution of Mechanical Engineers (Great Britain)			
NAuS	National Audubon Society, 225 Varick Street, NY, NY 10014			
NIHF	National Inventors Hall of Fame, 3701 Highland Park, NW, North Canton, OH 44720			
NSPE	National Society of Professional Engineers, 1420 King Street, Alexandria, VA 22314-2715			
SAE	Society of Automotive Engineers International, 400 Commonwealth Drive, Warrendale, PA 15096-0001			
SME	Society of Manufacturing Engineers, One SME Drive, Dearborn, MI 48121-0930			
SNAME	Society of Naval Architects and Marine Engineers, 1452 Duke Street, Alexandria, VA 22314			
SWE	Society of Women Engineers, 203 N. La Salle Street, Suite 1675, Chicago, IL 60601			
WSE	Western Society of Engineers, 1111 Burlington Avenue, Suite 108, Lisle, Illinois 60532-1290			



To: The Nominator(s)

From: ASME Committee on Honors (COH)

This information will assist nominators and endorsers in completing a nomination form for ASME Society-Level Awards or Joint Awards. Specific criteria for each award can be found on the individual award web page at https://www.asme.org/about-asme/get-involved/honors-awards/achievement-awards.

The importance of the quality of the nomination itself, and of the supporting endorsement letters, cannot be overemphasized. The nomination and endorsements should be as specific, accurate, and complete as possible. It is imperative that the true merits of the candidate be conveyed through this information. Keep in mind that in some cases, those involved in the selection process may have no personal knowledge of the candidate, and will rely heavily on the nomination package for the information they need to make reasonable judgments.

An individual will receive only one honor in recognition of the same achievement. The receipt of one ASME honor shall not bar the recipient from another ASME honor provided it is for a different accomplishment. Therefore, it is important to tailor the nomination package, including the letters, to address the specific criteria of the award so as not to disqualify the nominee from future awards.

Nominator Eligibility: Any person may nominate a candidate for a Society-Level Award with the following exceptions:

- Members of the ASME Board of Governors
- Members of the Committee on Honors
- Members of the General Awards Committee
- Award Selection Committee Members, serving on the Selection Award Committee
- Self-nominations (except for the Charles T. Main Student Leadership Award)
- ASME staff

Endorser Eligibility: Any person may write a letter of support for a candidate for a Society-Level Award, with the following exceptions:

- Members of the ASME Board of Governors
- Members of the Committee on Honors
- Members of the General Awards Committee
- Award Selection Committee Members, serving on the Selection Award Committee
- ASME staff

At least two of the supporters must be members of ASME and no more than one should be from the candidate's organization. To avoid conflicts of interest, participation of nominators and supporters who have a monetary relationship with, or are immediate superiors of, a nominee is strongly discouraged. If the nominators are close professional or business associates of the nominee, make sure that the supporters also include people outside the immediate associates of the nominee.

If you are recommending a resubmitted nomination, please ensure that the nomination is as current as possible and no more than three years old.

For award requirements, deadline, etc. go to:

https://www.asme.org/about-asme/get-involved/honors-awards/achievement-awards.

The following pages contained information on how to complete a nomination form.

ASME ACHIEVEMENT AWARD NOMINATION FORM

- 1. LIST THE NAME OF THE AWARD.
- **2. DATE:** Give the date the nomination is sent to ASME Headquarters.
- **3. NOMINEE:** Provide the full name, ASME membership grade, date of birth, position held, and address(s) of the nominee (s).
- **4. CITATION:** Give a 35-40 word summary of nominee's qualifications.

Remarks: The citation is the heart of the nomination. It should be specific to the award and must be supported in the statement of qualifications that follow.

It should be substantially different from past awards received.

5. LIST PRIOR AWARDS RECEIVED FROM ASME.

A high degree of overlap between prior awards and new awards should be avoided since an individual can only receive one honor in recognition for the same body of work.

6. NOMINATOR: List the nominator's name, any ASME committee positions held, and the relationship of the nominator to the nominee.

The nominator is required to provide a letter of support.

7. REFERENCES: Four letters of reference are required, one from the nominator and three from supporters. The supporters should be acquainted with the nominee's qualification as they relate to the requirements of the award. To avoid potential conflicts of interest, participation of nominators and supporters that have a monetary relationship with, or are immediate superiors of, a nominee is strongly discouraged.

At least two of the supporters must be members of ASME and no more than one should come from the nominee's organization.

8. QUALIFICATIONS: Give complete statements of the specific ways in which the

nominee meets the requirements for the honor. Please remember that the judges of your nominee have nothing on which to base their judgment except the facts in your nomination. The statement of qualifications should be a narrative summary with heavy emphasis on the accomplishments that make the nominee worthy of the honor. It should be readable from the first word to the last, written in the active voice. It should be clear and succinct, yet complete. The nomination package should focus only on the achievements related to the specific award. It is not a good idea to dwell on the totality of contributions because (i) it may not be necessary, and (ii) it may create problems for future award nominations when incremental or additional contributions are evaluated.

In some cases, the statement of qualifications may be written around the chronological steps in a nominee's career. Such a treatment permits a simpler biographical statement required in item #11.

Frequently, publications or patents of the nominee provide important facts about the nominee's achievements and may be brought into the argument in this section of the nomination rather than separately under Publications and Patents below.

 PUBLICATIONS: List no more than 15 in approximate order of significance and comment on the most important, up to a maximum of 5.

The books and articles written by the nominee are frequently his/her only visible output. A chronological list of 50 or 100 books and papers produced by the nominee may frequently have little relation to the achievements of the nominee.

The purpose of the Committee on Honors in requesting a list of only 15 publications and having comments on a maximum of 5 is to require the nominator to point to those publications which support the nominee's achievements and establish the claim to the honor for which he/she is nominated.

As stated above, the quoting of publications to substantiate the nominee's achievements may best be handled under Qualifications, leaving under Publications only a short statement about the number of publications produced and giving a general listing of the subjects covered.

10. U.S. AND FOREIGN PATENTS: List no more than 15 in approximate order of significance and comment on the most important, up to a maximum of 5, using the same procedures described for publications. **11. BRIEF BIOGRAPHY**: Give birth date, education, positions held, honors, ASME activities, and participation in other engineering societies.

In listing positions held, include directorships of civic activities and industrial corporations.

For a nominee having many honors, those honors should be included that support the achievements for which the individual is being nominated.

Click <u>here</u> for more details on the various awards' criteria and limitations.

Complete pages 4 and 5.



NOMINATION FOR ASME SOCIETY ACHIEVEMENT AWARD

1.	NAME OF AWARD:	
2.	DATE SUBMITTED:	
3.	FULL NAME OF NOMINEE(S):	
	ASME Membership or Grade of Nominee	Date of Birth
	Nominee(s) Current Position	
	Nominee(s) Address	
	(Indicate whether home or business)	
1.	<u>CITATION</u> : (35-40 word summary of nomine overlap between prior awards and new av recognition for the same achievement.)	ee's qualifications. The citation should be specific to the award. A high degree of wards should be avoided since an individual can only receive one honor in
5.	LIST PRIOR AWARDS RECEIVED FROM A	ASME:
S.	NOMINATOR: (ASME committee connection support detailing the nominee's qualification	ns, professional acquaintanceships). The nominator is required to submit a letter of for the award.
	-	
	NOMINATOR E-MAIL:	

the award who have written the attached letters. Please be advised that the Committee on Honors will not consider more than four reference letters). The nominator's letter is considered a reference letter.
At least two of the reference letters must be members of ASME and no more than one should come from the nominee's organization.

7. REFERENCES: (Names and addresses of the three individuals acquainted with nominee's qualifications and requirements of

- 8. **QUALIFICATIONS**: Give complete statements of the specific ways in which the nominee meets the requirements for the honor. Be sure to support all claims made on the individual's accomplishments.
- 9. **PUBLICATIONS**: List no more than 15 in approximate order of significance and comment on the most important, up to a maximum of 5. Please cite those publications that specifically support the nominee's achievements and establish a claim to the honor for which the individual is nominated. If there are no publications, please so indicate.
- 10. **PATENTS**: List no more than 15 in approximate order of significance and comment on the most important, up to a maximum of 5. As with the publications, please cite those patents which specifically support the nominee's achievements and establish a claim to the honor for which the individual is nominated. In the event that the nominee holds no patents, please so indicate.
- 11. <u>BRIEF BIOGRAPHY</u>: Give birth date, education, positions held, honors, ASME activities, and participation in other engineering societies. In listing positions held, include directorships of civic activities and industrial corporations. For a nominee having many honors, those honors should be included that support the achievements for which the individual is being nominated.

INDEX

ASME Medal	······································
Adaptive Structures and Material Systems Award	
Allan Kraus Thermal Management Medal	
Arthur L. Williston Medal	
Barnett-Uzgiris Product Safety Design Award	
Ben C. Sparks Medal	
Bergles-Rohsenow Young Investigator Award in Heat Transfer	
Bernard F. Langer Nuclear Codes and Standards Award	6, 15, 23
Blackall Machine Tool and Gage Award	6, 15, 63
Burt L. Newkirk Award	
Charles Russ Richards Memorial Award	
Charles T. Main Student Leadership Awards	3, 7, 15, 25-27 , 73
Daniel C. Drucker Medal	
Dedicated Service Award	
Dixy Lee Ray Award	
Edward F. Obert Award	
Edwin F. Church Medal	
Fluids Engineering Award	
Frank Kreith Energy Award	
Freeman Scholar Award	
Gas Turbine Award	
George Westinghouse Medals	
Gustus L. Larson Memorial Award	
H.R. Lissner Medal.	
Heat Transfer Memorial Award	
Henry Hess Early Career Publication Award	
Henry Laurence Gantt Medal	
Henry R. Worthington Medal	
Holley Medal	
Honorary Member	
Internal Combustion Engine Award	
J.P. Den Hartog Award	
J. Hall Taylor Medal	
James Harry Potter Gold Medal	
James N. Landis Medal	
Johnson & Johnson Consumer Companies, Inc. Medal	10, 16, 39
Kate Gleason Award	
M. Eugene Merchant Manufacturing Medal of ASME/SME	
Machine Design Award	10, 16, 41
Marshall B. Peterson Award	
Mayo D. Hersey Award	
McDonald Mentoring Award	
Melville Medal	
Melvin R. Green Codes and Standards Medal	
Milton C. Shaw Manufacturing Research Medal	
Nadai Medal	
Nancy DeLoye Fitzroy and Roland V. Fitzroy Medal	11, 17, 45
Old Guard Early Career Award	
Old Guard Prizes	
Outstanding Student Section Advisor Award	
Patrick J. Higgins Award	11, 17, 48
Per Bruel Gold Medal for Noise Control and Acoustics	
Performance Test Codes Medal	
Pi Tau Sigma Gold Medal	12, 17, 50

Prime Movers Committee Award	17, 68	į
R. Tom Sawyer Award	17, 51	
Ralph Coats Roe Medal	17, 51	
Robert E. Koski Medal		
Robert Henry Thurston Lecture Award		
Robert M. Nerem Medal	17, 53	,
Rufus Oldenburger Medal	18, 54	į
Ruth and Joel Spria Outstanding Design Educator Award		
S.Y. Zamrik PVP Medal		
Safety Codes and Standards Medal	18, 55	į
Savio L-Y. Woo Translation Biomechanics Medal		
Sia Nemat-Nasser Early Career Award	18, 56)
Soichiro Honda Medal 13,	18, 57	,
Spirit of St. Louis Medal	18, 57	,
Thomas A. Edison Patent Award		
Timoshenko Medal	18, 58	į
Van C. Mow Medal14,		
Warner T. Koiter Medal		
Wilfred C. LaRochelle Conformity Assessment Award	19, 60	į
William T. Ennor Manufacturing Technology Award		
Worcester Reed Warner Medal	14, 69	i
Y.C. Fung Early Career Award		
Yeram S. Touloukian Award	19, 61	