American Institute of Mining, Metallurgical, and Petroleum Engineers

# 2019 ANNUAL REPORT



12999 East Adam Aircraft Circle Englewood, Colorado 80112 Phone 1.303.325.5185 Fax 1.888.702.0049 http://www.aimehq.org

### Member Societies:









### **Table of Contents**

Report of the 2019-2020 AIME Leadership: The Year in Review
President's Notes[6
Report of the 146th Annual Meeting
New AIME 2020-2021 Officers and Trustees
AIME Past Presidents – Active List
Recipients of Awards Presented by AIME in 2019[14
Recipients of Scholarships Presented by AIME in 2019[19]
AIME Honorary Members[21
Legion of Honor – 50 Year Members – Class of 1969 [23]
Financials[26
Member Societies[45

### **The Year in Review**



Hani Henein 2019 President



Michele Lawrie-Munro Executive Director

# Report of the 2019 – 2020 AIME Leadership

#### **Mission-Driven Governance**

AIME is governed by a Board including 2 Trustees from each of its 4 Member Societies and the Executive Director. This year the group welcomed two of the four Member Society Executive Directors as part of the Board. Most work is done by AIME's Audit, Investment, and History and Heritage Committees. We thank volunteers serving in these capacities as well as other Member Society representatives on external award committees as shown on the following page:

	= new appointment			
	Audit Committee	Investment Committee	History and Heritage Committee	External Affairs
Rules	President-Elect Chair	Treasurer Chair, President-Elect, MS Finance Staff	President-Elect Designate Chair	AIME Board Direct Oversight
SPE	Roland Moreau	Steve Byrne	Jennifer Miskimins	
TMS	Jim Robinson	Steve Reubi	Jim Robinson	
SME	George Luxbacher (Chair)	Ta Li (Chair); George Luxbacher; Brett Wichert	George Luxbacher	
AIST	Ron Ashburn	Mark Didiano	Kevin Zeik, Chair	
AIME	Michele Lawrie-Munro	Michele Lawrie-Munro	Michele Lawrie-Munro	
			ETHW Council	United Engineering Foundation
SPE TMS				Garry Warren (through September 2021) George Luxbacher (through
SME				September 2019); Roland Moreau (through September 2023)
AIST				
AIME			Michele Lawrie-Munro	
			Member Society Award Ctes	AAES
SPE			Various	
TMS			Various	Brajendra Mishra (Board)
SME			Various	Nikhil Trivedi (Audit Committee)
AIST			Various	
Aime				Emerging Leaders Alliance
SPE				James Whitaker
TMS				Debby Hixon
SME				Mona Vandervoort
AIST				Chris McKelvey, Jamie Blick
AIME				Michele Lawrie-Munro
				DiscoverE Family Day Outreach
SME AIME				Mike Kaas and other SME-DC Section members; NMA staff Michele Lawrie-Munro
				Hoover Award
SPE				George Koperna
TMS				Oladele A. Ogunseitan
SME				Ponisseril Somasundaran, Alternates: Tuncel Yegulalp, S.A. "Ravi" Ravishankar, Peter Bethell
				Noble Prize
TMS				Boyd Davis
				Washington Award
SPE				
TMS				
SME				
AIST				
				National Inventors Hall of Fam

**AIME's History and Heritage Committee** is focused on AIME awards and recognition, preserving and enhancing legacy, and special projects.

#### **AIME Awards and Scholarships**



AIME funds the annual conferring of 25 awards, including Honorary Membership, as well as 5 scholarships. Many of these carry the namesake of icons within the AIME disciplines of mining, metallurgical, and petroleum engineering, the iron and steel industry, and materials science. Member Society staff and committees administer most of these for the AIME Board and the AIME President presents them during annual conferences. In 2019, the group published articles for award namesakes in Member Society journals. More information can be found at http://aimehg.org/programs-/honors-awards.

#### **Preserving and Enhancing AIME's Legacy**

AIME continues to partner with 7 other groups to enhance the **Engineering and Technology History Wiki** (www.ethw.org). This invaluable resource contains articles, biographies, and interviews of important figures and historical events and innovations in multiple engineering disciplines. There are also lesson plans and interactive landmarks across the globe and timelines of important milestones within particular disciplines over the course of human history. AIME has included Mining and Materials timelines, as well as its own and Member Society archives from its nearly 150 year history – most can be found under the main heading of "Materials" and "Energy". Users can also create a free account to include their own autobiography or preserve their experiences.





#### **Special History and Heritage Projects**

AIME's History and Heritage Committee captured 11 new <u>oral histories of prominent members</u> in 2018, 12 in 2019, and 6 in 2020 with the help of students, staff, and peers, most at Member Society annual conferences. AIME staff coached participants on the process and ran recording equipment. Uploaded material is accessible at <a href="http://aimehq.org/programs/oralhistories">http://aimehq.org/programs/oralhistories</a>; new captures will be released monthly. Follow AIME on <a href="Facebook">Facebook</a> or <a href="Twitter">Twitter</a> to learn about new releases.

AIME also approved SME's President to deliver congratulatory resolutions to SME's Minnesota and Pittsburgh sections, which celebrated their 100th

anniversaries in 2020. It will also begin sending these to sections celebrating their 75th or 100th milestones. Finally, AIME adopted a new logo and pins, had a kiosk at Member Society annual conferences to promote its legacy work, and will update its website leading up to its 150th anniversary in 2021.

Finally, AIME's President, Executive Director, and Treasurer attended the Offshore Technology Conference's 50th Anniversary in May 2019. AIME was a founder of the international event.

**AIME's External Affairs** are overseen by the AIME Board with Member Society volunteer participation on several joint engineering society award committees.

#### **External Awards and Recognition**

Member Society members are also eligible for 25 awards. ioint engineering society example, SPE member, David Baldwin, received the 2018 Hoover Award for over 25 years committing time and skills to The Center, a Houston-based organization (non-profit) dedicated to empowering adults with intellectual and developmental disabilities (I/DD) and for cofounding Pursuit, a capital campaign, which transformed the organization's future and raised \$13.6 million to further its mission. AIME promotes these opportunities via social media. Details can be found at <a href="http://aimehg.org/programs-/honors-">http://aimehg.org/programs-/honors-</a> awards.



#### **Interaction with External Entities**

AIME and Member Society leadership represented the groups at the <u>United Engineering Foundation</u> (<u>UEF</u>) Board meeting at ASME offices in New York last fall. UEF gives over \$800,000 in grants annually to deserving 501(c)3 organizations which advance engineering. AIME received one for its Congress on Safety in Engineering and Industry 2020, which has been postponed due to the pandemic.



AIME and its Member Societies were also represented at other joint engineering society events in Washington, DC: the National Academy of Engineering's Convocation, where the group heard from a distinguished panel on Diversity and Inclusion in Engineering as well as legislators on Capitol Hill at the ASME-led Public Policy Symposium. The American Association of Engineering Societies (AAES) is currently going through a dissolution process. AIME's Member Society, SME, will be administering the joint engineering society, Fritz Award, for the groups beginning 2021. Finally, AIME provided support for SME's DC section and Coal Foundation and National Mining Association staff, who volunteered to represent the groups during eWeek at the DiscoverE's Family Day outreach.

#### **Collaborative Programs**

AIME is one of 9 partners in the <u>Emerging Leaders Alliance (ELA) young leaders training</u>. In 2019, **AIME hosted 6 young professionals**, including 1 AIST member, 1 ACI member, 3 NIOSH employees (and SME members), and 1 SPE member, at this interactive conference. AIST staff manage the program for this important joint leadership initiative.



#### **Foundational Role**

**AIME's Investment and Audit Committees** work hard to ensure that AIME can support its special initiatives as well as provide tangible monetary support to its Member Societies. SME Past President (and AIME Treasurer), Ta Li, chaired AIME's Investment Committee and SME Past President, (and AIME Past President and President-Elect), George Luxbacher, chaired AIME's Audit Committee.

For many years, AIME has provided **50% of surplus to its Member Societies to use as they see fit**. From 2017 surplus, AIME issued over \$164,000 to each organization in 2018. The AIME Board **voted in December 2019 to stabilize these distributions, providing \$50,000 per year for the next 5 years to each Member Society**. During this pandemic year, AIME provided the initial distribution for use as the groups see fit. Going forward, their Boards are to submit proposals for a long-term project critical to the Member Society which enhances and promotes the legacy and branding of AIME within their organization.

Of the remainder AIME surplus, 10% has been allocated to AIME 150th anniversary activities. AIME is funding celebrations at the Member Society annual meetings beginning with SPE ATCE in Houston October 12-14, 2020, as well as special projects being produced by SPE and TMS/SME for use at those functions. The AIME Board has also been a **Member Society Foundation donor** giving \$1,000 to each group annually since 2016.

Hani Heinen 2019 President Michele Lawrie-Munro Executive Director

A Michele Yaurie Munro

#### **Foundational Role**

AIME's Investment and Audit Committees work hard to ensure that AIME can support its special initiatives as well as provide tangible monetary support to its Member Societies. SME Past President (and AIME Treasurer), Ta Li, chaired AIME's Investment Committee and SME Past President, (and AIME Past President and President-Elect), George Luxbacher, chaired AIME's Audit Committee.

For many years, AIME has provided **50% of surplus to its Member Societies to use as they see fit**. From 2017 surplus, AIME issued over \$164,000 to each organization in 2018. The AIME Board **voted in December 2019 to stabilize these distributions, providing \$50,000 per year for the next 5 years to each Member Society**. During this pandemic year, AIME provided the initial distribution for use as the groups see fit. Going forward, their Boards are to submit proposals for a long-term project critical to the Member Society which enhances and promotes the legacy and branding of AIME within their organization.

Of the remainder AIME surplus, **10%** has been allocated to AIME **150th** anniversary activities. AIME is funding celebrations at the Member Society annual meetings beginning with SPE ATCE in Houston October 12-14, 2020, as well as special projects being produced by SPE and TMS/SME for use at those functions. The AIME Board has also been a **Member Society Foundation donor** giving \$1,000 to each group annually since 2016.

Hani Heinen 2019 President Michele Lawrie-Munro Executive Director

A Michele Yaurie Munro

### **President's Notes**

It is normal that one can never predict the challenges and issues that have to be addressed during one's Presidential term. Following on the footsteps of good Volunteer Leaders that have served recently as well as those stepping down from the AIME Board as Trustees or as Officers, I am humbled looking back at my year on their dedication and inspiration to AIME. I am also grateful for the efforts, loyalty and hard work that our Executive Director, Michele Lawrie-Munro, contributes to AIME. This has been a year unprecedented in AIME's 149 year history, largely because of the arrival of the COVID-19 pandemic that played a major part of the restructuring of the activities of AIME this year. Our first Safety Congress posed to be a stupendous success due to the hard work of Roland Moreau as its Chair, Ron Ashburn and Jim Robinson carrying the main responsibility for the management, hotel arrangements, advertising, fund raising, and all things necessary for event planning. Due to the pandemic, it had to be postponed.

As you read in the detailed report, the Board worked at making the funds distributed to the Member Societies more predictable over the next few years. This effort also helps streamline and simplify AIME's administrative activities. AIME is still awaiting the transfer of its registration to Colorado from New York. In the midst of this transfer we embarked on a new governance structure for the Board, one that will hopefully help AIME be more efficient and effective. But, it also identified challenges in updating AIME's Conflict of Interest Policy which is an ongoing effort.

AIME continued its legacy programs of Awards and Scholarships as well as the building of its library of Oral Histories. These activities remain the hallmark of the history and stature of AIME.

With this I wish to extend to my fellow Trustees my acknowledgment for their support, commitment and efforts on the Board. Special thanks go to retiring Trustees, Ta Li, who has also served as Treasurer the past three years, and Roland Moreau, who very ably leads the Safety Congress and has updated Bylaws and Operating Practices for future consideration of the Board when AIME becomes a Colorado entity. I look forward to learning of the Member Society celebrations for AIME's 150th anniversary and wish new and continuing Trustees the best for continued success of AIME.

2019 AIME President

## Report of the 148th Annual Meeting

The 148th AIME Annual Board Meeting was held at SPE headquarters in Dallas, TX August 1-2, 2019. The group toured the building and heard overviews of SPE activities from VP Information and Member Services, John Boden, VP Communications, Glenda Smith, and Chief Operating Officer, Stephen Graham. The official Board meeting was held Thursday and Friday. On Friday evening, attendees toured the historic DeGolyer mansion followed by dinner at the Dallas Arboretum. Everette DeGolyer was an AIME/SPE member - SPE confers the DeGolyer Award to one of its members annually.



### **New AIME 2020-2021 Officers and Trustees**

#### **PRESIDENT**



George Luxbacher (SME - Term ends 2022)

Dr. George W. Luxbacher is vice president of operations with Glenn Springs Holdings, a subsidiary of Occidental. Dr. Luxbacher manages Occidental's RCRA and CERCLA liabilities related to the oil and gas, chemicals and former mining-business segments. Among other responsibilities, he deals with issues related to acid mine drainage from former coal and copper mining sites. Dr. Luxbacher is the co-inventor of a process to dredge and refine phosphorus-bearing sludge into a marketable product and, as part of that work, developed, designed and constructed a phosphorus recovery plant in Tennessee. Dr. Luxbacher is a registered professional engineer and a Centennial

Fellow of the Pennsylvania State University's College of Earth and Mineral Sciences. He earned B.S., M.S. and Ph.D. degrees in mining engineering from the Pennsylvania State University. Dr. Luxbacher is a past-president of OneMine.org and a member of the SME Foundation Board of Trustees. He was president of SME in 2008. He is the founder of the Coal & Energy Division scholarship auction and luncheon speaker programs. He has served as chair of the division and on the Executive Committee of the Central Appalachian Section. He served on the ad hoc committee for SME Governance and was a driving force to create the Education Strategic Committee.

#### PRESIDENT-ELECT



Kevin Zeik (AIST - Term ends 2021)

Dr. Kevin L. Zeik graduated from The Pennsylvania State University with a Ph. D. in Metals Science and Engineering in 1991. His graduate work was focused on copper – niobium microcomposites for the hypersonic aerospace program, working as a Researcher at the Ames Laboratory, Iowa State University. Upon graduation, Zeik joined the United States Steel Corporation Research Center in Monroeville, PA as a Senior Research Engineer working on electron microscopy and surface sciences of steel products. In 1994, he moved into the failure analysis group as an Associate Research Consultant, and two years later, he was named Research

Manager for the failure analysis, computer modeling and welding groups. Zeik moved to the Materials Technology section in 1999, serving as Research Manager of the group until 2002, when he advanced to Technical Director. In 2004, Kevin was named Director - Process Technology Division where he oversaw efforts to improve process efficiency from mining operations through iron and steelmaking and into finishing and coating processes. He focused on the adaptation of existing processes and development of new processes to meet the demands presented by the production of new high performance steel grades. In that year, the Research and Technology was moved to its current location in Munhall, PA. In August 2008, he was advanced to his current position, General Manager – Research for United States Steel Corporation where he is now responsible for directing all research and development activities associated with flat rolled and tubular steels and steel solutions.

Zeik has been a member of AIST and its predecessor organization, ISS, for over 20 years. He has held the positions of Chair – Mechanical Working Division of ISS, and served on the Board of Directors of AIST, including the transition team from ISS to AIST.

#### PRESIDENT-ELECT DESIGNATE



Jennifer Miskimins (SPE - Term ends 2024)

Dr. Jennifer L. Miskimins is a Professor and the Department Head of the Petroleum Engineering Department at the Colorado School of Mines, where she holds the F.H. Mick Merelli/Cimarex Energy Distinguished Department Head Chair. Dr. Miskimins holds BS, MS, and PhD degrees in petroleum engineering and has split her career between industry and academia with appointments at the Colorado School of Mines, Marathon Oil Company and Barree & Associates. She has been with the Colorado School of Mines in various capacities since 2002.

Dr. Miskimins specializes in well completions, stimulation, hydraulic fracturing, and associated production issues. She is the founder and current Director of the Fracturing, Acidizing, Stimulation Technology (FAST) Consortium and also directs the Center for Earth Materials, Mechanics, and Characterization (CEMMC). Her research interest focus on the optimization of stimulation treatments and the importance of such on associated recovery efficiencies.

Dr. Miskimins served as the first Completions Technical Director on the SPE International Board of Directors from 2015-2018. She was an SPE Distinguished Lecturer in 2010-2011 and 2013-2014 on hydraulic fracturing in unconventional reservoirs. In 2014, she was awarded the SPE International Completions Optimization and Technology Award. Dr. Miskimins serves on a variety of conference organizing committees and as a technical editor for various journals. She was the Editor-in-Chief for the recent SPE Monograph update Hydraulic Fracturing: Fundamentals and Advancements. Dr. Miskimins is a registered Professional Engineer in the State of Colorado (License #36193).

#### **PAST PRESIDENT**



Hani Henein (TMS - Term ends 2021)

Hani Henein is a Professor at the University of Alberta and Director of the Advanced Materials and Processing Laboratory (AMPL). Henein earned a B.Eng. and an M.Eng. in Metallurgical Engineering (1972 and 1976, respectively) from McGill University. In 1981, he received his Ph.D. from the University of British Columbia and joined the faculty at Carnegie Mellon University in Pittsburgh, Pennsylvania. He joined the University of Alberta in 1989 and is a registered Professional Engineer in the Province of Alberta.

The main thrust of Henein's research at Alberta and as Director of the AMPL is to develop new techniques for

improved operation of current processes and to develop new near net shapeprocessing routes. This research entails the understanding of the relationship among processing, structure, and properties and making this understanding accessible on-line to process operators. Some recent areas of interest in research include: particulate mixing and segregation, rapid solidification, zone refining, strengthening microalloyed steels, and WC-Ni composites for wear applications. Henein holds one patent, has published more than 140 papers, edited nine books, and consults in the United States, Canada, and Europe.

His research and professional efforts have received wide recognition, including best paper awards such as the Henry Marion Howe Medal from ASM International, the John Chipman Medal from the Association for Iron & Steel Technology (AIST), and the Best Paper Award from the Metallurgical Society (MetSoc) of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM). He was given a Presidential Citation from the Iron and Steel Society (now AIST) and was the recipient of the Silver Medal of MetSoc (CIM). He has received the prestigious Killam Research Fellowship and is a Fellow of the Canadian Academy of Engineering, of CIM and ASM International.

Henein has held senior leadership positions in AIST and TMS. He has served on the AIST and TMS Board of Directors and is a Past President of TMS (2014).

### **Non-Officer Trustees**



Ronald Ashburn (AIST)

Ronald Ashburn is the first executive director of the Association for Iron & Steel Technology (AIST), having served in that capacity since the organization's founding in January 2004. In his role as executive director, Ashburn is responsible for oversight of business operations and strategic planning initiatives for AIST and the AIST Foundation. He formerly served as the eighth managing director for the Association of Iron and Steel Engineers from 2002 until its merger with the Iron & Steel Society, which led to the formation of AIST. Prior to joining AISE, he worked 16 years with Mannesmann Demag, a global builder of steel plants, first joining

them in 1986 as a mechanical engineer in their Continuous Casting Division. In 1996, Ashburn was appointed director of technology for steelmaking and casting, and in 1997 he became vice president — casting and hot rolling. In 1999, SMS and Mannesmann Demag merged to form SMS Demag, where he served as vice president — operations for their Steelmaking and Casting Division in Pittsburgh, Pa., USA. Ashburn received his B.S. degree in mechanical engineering from the University of Pittsburgh (1987) and participated in metallurgical process training at University of British Columbia (1987) and global business management training at the University of Virginia (1998). He served on the board of directors for Visit Pittsburgh and was a member of its executive committee.



Dave Kanagy (SME)

Since joining SME in 2004, Kanagy has been largely responsible for the Society's success. Focusing on growth, innovation and opportunity, SME has become the world's largest mining related organization. He is the recipient of two prestigious awards including the Colorado Society of Association Executives' Professional of the Year award and the Mining and Metallurgical Society of America's Gold Medal award. He has a B.S. degree in industrial education from the University of Maryland, a M.S. degree in technology education from Eastern Illinois University and is a certified association executive by the American Society of Association

Executives.



Jim Robinson (TMS)

James J. Robinson has held a number of positions within TMS since joining the Society in 1984 as an editorial team member for JOM.Prior to becoming executive director in 2012, he held the position of deputy executive director. In that position, Robinson managed the development and execution of the Society's programs and supported the Board of Directors, the Executive Committee, and other volunteer bodies, inclusive of governance and strategic planning activities. He also supports the efforts of the TMS Foundation as an ex-officio member of the Board of Trustees. Robinson's past positions with the Society include serving as Chief

Operating Executive, Director of Knowledge Management and Communication, and Editor of JOM (TMS's membership journal). He still contributes to JOM as a monthly columnist.

Robinson is an ASAE Certified Association Executive (2009). Academically, he earned his M.A., corporate communication, from Duquesne University (Pittsburgh, Pennsylvania) and his B.A., journalism and communications, from Point Park University (Pittsburgh, Pennsylvania). His non-materials professional affiliations include ASAE, the Council of Engineering and Scientific Society Executives, and the Pittsburgh Society of Association Executives.



## Mark Rubin (SPE)

Mark Rubin is responsible for overall management of SPE. He works with the Board of Directors and senior staff to develop strategic and business plans and formulate the organization's goals, objectives, policies, and programs. He also organizes and directs the global staff organization, which includes offices in Dallas, Houston, Kuala Lumpur, Dubai, London, and Moscow, to ensure the accomplishment of SPE's mission.

He was appointed executive director of SPE in August 2001. Prior to this appointment, he served as upstream general manager for the American Petroleum Institute (API) in Washington, D.C. He joined API in 1988 and held a series of positions working on federal regulatory and legislative matters as well as technical standards development.

A member of SPE since 1979, Rubin held petroleum engineering positions for Unocal in Houston and east Texas from 1981 to 1987 and for Buttes Resources in Dallas 1987–88. Rubin is a member of the American Society of Association Executives and Council of Engineering and Scientific Society Executives. He has been a member of the National Petroleum Council, Interstate Oil and Gas Compact Commission, and International Association of Oil and Gas Producers. He earned a BS degree in petroleum engineering from Texas A&M University and an MBA from Southern Methodist University.

### **Non-Voting Trustees**



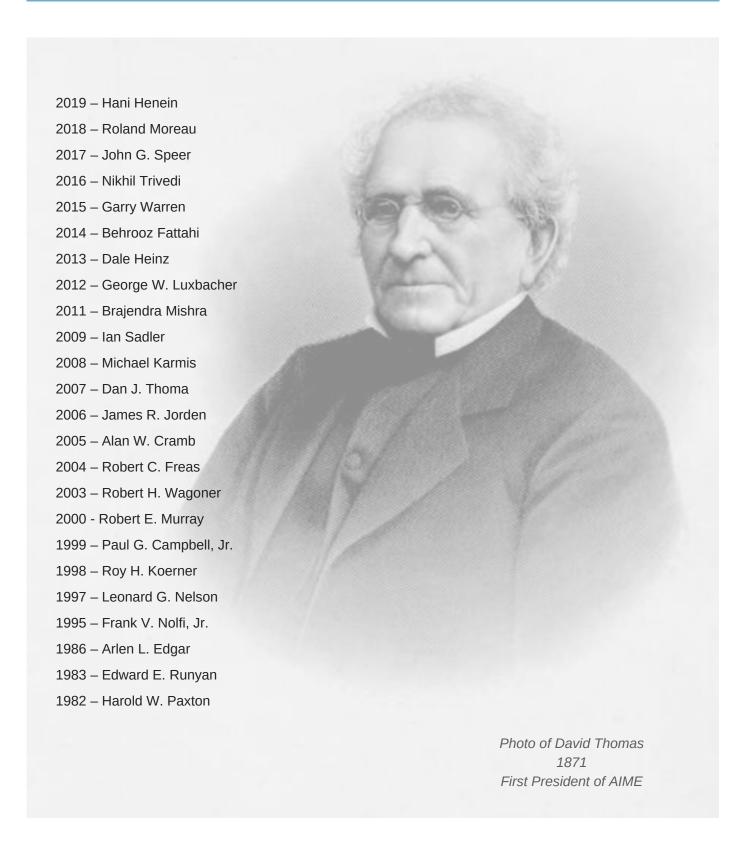
## L. Michele Lawrie-Munro Executive Director

Michele Lawrie-Munro has been the Executive Director of the AIME since 2011 having been promoted from the Associate Executive Director position she held since May 2003. Her recent experience includes managing operations as well as leading multi-disciplinary, collaborative efforts.

In addition to the not-for-profit arena, she has used her management and marketing skills in the public and private sectors for telecommunications and professional services firms. She has been involved in research, leadership

development and recognition initiatives and been a liaison on systems requirements. She has previously volunteered in leadership positions with the Boy Scouts of America and the Hugh O'Brien Youth Foundation. She received the Certified Association Executive (CAE) designation in 2014 and has a bachelor's degree from the University of Colorado, as well as extensive corporate leadership training.

## **AIME Past Presidents - Active List**



## **Recipients of Awards**

#### **Honorary Membership**

Wendell Carter AIST

For his tireless contributions to the steel industry through his exceptional leadership and dedication to the Association for Iron & Steel Technology at all levels, including the AIST Foundation, AIST Executive Committee, and his tenure as 2016–2017 AIST president. His outstanding efforts to recruit young engineers to the steel industry and attract new members to the Association demonstrate his commitment to a sustainable future for the industry.

Maria A. Capello SPE

For her exceptional leadership in the oil and gas industry, as an SPE volunteer, and as an inspirational role model on three continents; and for her contributions as a managerial and technical leader, encouraging young professionals, the emergence of women as engineers, and technical specialists in the petroleum industry.

Anuj Gupta SPE

For his three decades of relentless professional service and great technical leadership to SPE and the oil industry, for his pioneering contributions piloting the SPE Certification program, and for his fierce devotion to stewarding petroleum engineering students into successful careers in the industry.

Franklin M. Orr, Jr. SPE

For his extraordinary analytical, laboratory, and numerical research in the field of CO2 enhanced oil recovery and storage/sequestration, his educational excellence and impactful management world-renowned education and research programs at Stanford University, and his service to the nation as Undersecretary of Energy.

Jeffrey B. Spath SPE

For his numerous significant contributions to academia, the Industry, and engineering in reservoir modeling, simulation, and management; for his exceptional service and leadership to SPE as the 2014 SPE President, and for establishing the Texas Oil & Gas Institute, serving as the inaugural CEO.

Ganesh C. Thakur SPE

FFor his distinguished scientific and engineering achievements in petroleum engineering focusing on Enhanced Oil Recovery, his successful innovations in reservoir management that impact the industry, and for his exceptional service and leadership as 2012 SPE President and as an AIME board member.

John O. Marsden SME

In recognition of service as SME president, unwavering commitment to the SME Foundation and its initiatives, leading the development of the Ph.D. Fellowship and Academic Career Development grant programs, for leadership and expertise in the field of mineral processing, inspirational mentorship, friendly can-do attitude, and energetic dedication to all the committees that have benefited from his guidance.

Korukonda Linga Murty TMS

For his contributions to the materials community through exemplary research and service in nuclear materials, high temperature deformation behavior, and nanostructured materials.

#### **AIME Presidential Citation (formerly AIME Distinguished Service Award)**

George Koenig

AIST

For his dedicated service to preserving and enriching AIME's legacy through his enthusiastic participation on AIME's History and Heritage Committee.

#### **Rossiter W. Raymond Memorial Award**

Lu Chi and Zoya Heidari

SPE

Directional-Permeability Assessment in Formations With Complex Pore Geometry With a New Nuclear-Magnetic-Resonance-Based Permeability Mo

#### Charles F. Rand Memorial Gold Medal

Kamel Bennaceur

SPE

For his role as Minister of Energy in Tunisia, developing and implementing their energy plan, and restoring oil production to pre-revolution levels; for his role at the International Energy Agency leading economists and policy makers to develop mid- to long-term energy scenarios; and as Chief Economist for ADNOC advising on business, strategy and technical options to achieve the company's vision.

Alexander J. Davidson

**SME** 

In recognition of his key role in numerous acquisitions and discoveries and his leadership in developing Barrick's unparalleled exploration program, which have resulted in remarkable achievements that distinguish his career and legacy at Barrick.

#### AIME Robert Earll McConnell Award

Ahmed S. Abou-Sayed

SPE

For expanding the natural resource base with his significant contributions to the drilling and improved recovery of oil, gas, and unconventional resources, and enhancing the standard of living with his work on injection technology best practices used for waste management and sequestration of oil field produced water, sulfur, CO2 and H2S.

#### **James Douglas Gold Medal**

Jiann-Yang (Jim) Hwang

TMS

For creative and exceptional contributions and leadership for the mineral processing and metallurgy community for over 40 years.

#### **AIME Mineral Economics Award**

Michael D. Doggett

SME

In recognition of a career at the forefront of evaluation and analysis of mining and exploration industry performance and his advisory roles to mining companies and organizations, financial institutions, and government bodies.

#### **Mineral Industry Education Award**

Manoj K. Mohanty

SME

For his outstanding contributions to mining and mineral engineering education, as well as his research in the areas of coal and mineral processing.

#### Frank F. Aplan Award

Jaisen N. Kohmuench

SME

For exceptional contributions to applied research, engineering development and commercial deployment of advanced flotation technologies.

#### **Erskine Ramsay Medal**

Sukumar Bandopadhyay

SME

For his notable contributions to the development and advancement of Alaskan coal resources, advancement of health and safety, and productivity in coal mines through research and professional leadership in SME's Coal & Energy Division.

#### **Robert H. Richards Award**

Jaime E. Sepúlveda

SME

For contributions to the advancement of comminution, support of research and education, development of open-access, industrially-accepted simulation tools (Moly-Cop Tools) for improving and optimizing grinding circuit efficiency.

#### William Lawrence Saunders Gold Medal

Timothy D. Arnold

SME

For a career devoted to making the mining industry a better, safer place to work.

#### **Robert Peele Award**

Emily J. Haas

**SME** 

Quick fixes to improve workers' health: Results using engineering assessment technology.

#### **Hal Williams Hardinge Award**

Jessica Elzea Kogel

**SME** 

For her commitment and immeasurable contributions that have advanced the development and sustainability of industrial minerals.

#### **Howard N Eavenson Award**

Thomas A. Gray, P.E.

SME

Thomas Gray's contributions to the advancement of coal mining have focused recently on the presence of Rare Earth Elements (REE) associated with coal. His hope for his research is to add value to the coal industry and increase economic growth in the industry.

#### **Daniel C Jackling Award**

Mary M. Poulton

SME

For her outstanding contributions to research and education, her vision in moving beyond the normal boundaries of university departmental constraints and her strong leadership in diversity in the mining industry.

#### **Champ Mathewson Award**

**TMS** 

Marcel Risse Christoph Fahrenson Marko Knezevic
Martin Lentz Walter Reimers Irene Beyerlein

Elevated Temperature Effects on the Plastic Anisotropy of an Extruded Mg-4 Wt Pct Li Alloy: Experiments and Polycrystal Modeling

and

Damien Texier Ana Casanova Gomez Stephane Pierret Jean-Michel Franchet Tresa Pollock

Patrick Villechaise Jonathan Cormier

Microstructural Features Controlling the Variability in Low-Cycle Fatigue Properties of Alloy Inconel 718DA at Intermediate Temperature

#### **Robert Lansing Hardy Award**

**TMS** 

Saryu Fensin

Nan Li

#### **Benjamin F. Fairless Award**

Brian G. Thomas

**AIST** 

For his dedication to the steel industry in developing and sustaining industrial and academic collaborations both nationally and internationally. A globally recognized expert in continuous casting and tireless researcher, his work in partnership with industry has provided countless impactful scientific publications, innovations and tremendous insight for the industry over the past 30 years.

#### J.E. Johnson Award

Kyle Ferron AIST

#### **Anthony F. Lucas Gold Medal**

Carlos Torres-Verdin

SPE

For his extraordinary scientific contributions to the industry in the realm of geophysical measurements and reservoir characterization, and developing groundbreaking methods for the petrophysical interpretation of multiple well logs that have been successfully adopted by service and operating companies.

#### **DeGolyer Gold Medal**

Hemanta K. Sarma

SPE

For his outstanding contributions to SPE through teaching, research, and professional service, as well as his contributions to the oil and gas industry exhibiting tremendous originality, creativity, dedication, and leadership.

#### **Hunt-Kelly Outstanding Paper (AIST) - 2019**

\* Partially funded by the AIME Robert W. Hunt Fund

First Place: State of the Art' HSS Work Roll for Later Stands (F4-F7) in Hot Strip Mill Finishing Trains

Nozomu Oda Yasunori Nozaki Takumi Oohata Paul Fleiner Tatsuya Tokunaga Hidenori Era

Note: The \$5,000 prize will be divided equally among the authors.

Second Place: Automation Enhancements to Improve Steel Production, Yield, Quality and Cost at the Burns Harbor Steel Production Shop, ArcelorMittal USA

James E. Bradley Gregory Gabbert Russell Mulligan
Garrett P. Flick David Sena Tyler T. Preall

Note: The \$2,500 prize will be divided equally among the authors.

Third Place: Quenching and Partitioning of Plate Steel: Thermal Gradients and Microstructure Development During Quenching

Rachel A. Stewart John G. Speer Brian G. Thomas

Amy J. Clarke Emmanuel De Moor

Note: The \$1,000 prize will be divided equally among the authors.

## **Recipients of Scholarships**

#### **Henry DeWitt Smith Scholarship - 2019**

#### **SPE**

Eric Anash, Kyushu University, Japan

#### **SME**

Marcelo Teixeira, Geo-Engineering, University of Nevada-Reno Bijan Peik, Geo-Engineering, University of Nevada-Reno Laura Steeves, Geo-Engineering, University of Kentucky

#### **AIST**

Ali Asgarian, Materials Science & Engineering, University of Toronto Bradley W. Hostetler, Carnegie Mellon University Virginia K. Judge, Metallurgical Engineering, Colorado School of Mines Eric M. Tenuta, Materials Science, University of Ontario Institute of Technology

#### **TMS**

Brady Dowdell, North Carolina State University, Raleigh, NC Pranjal Nautiyal, Florida International University, Miami, FL

#### Benjamin F. Fairless Scholarship – 2019

#### **AIST**

Harland C. Ashby, Mechanical Engineering, Texas A&M Jacob A. Meyer, Purdue University David R. Salmeron, University of Maryland Eastern Shore, Mechanical Engineering

#### John S. Marshall Memorial Scholarships - 2019

Shivan Singh Bhadoria Amit Chatterjee Rishabh Gurjar Aditya Himanshu Surendra Kumar

Vivek Oraon Vishal Raj Anant Singhal

Indian Institute of Technology (ISM), Dhanbad

#### The Lewis E. and Elizabeth W. Young Undergraduate Scholarships - 2019

\* Selected by SME-WAAIME Pennsylvania-West Section

West Virginia University - Mining Engineering

Toussaint Boulaz Zoey Carper Erica McCauley

Andrew Moore Thomas Wetzel

University of Pittsburgh - Petroleum Engineering

Luke Rattay Ryan Mowry

University of Kentucky - Mining Engineering

Paul Holmgren Kyle Ressler

**Colorado School of Mines** 

Miguel Morelia

**South Dakota School of Mines** 

Safiatu Barrie

**New Mexico Tech** 

Mariana Moira Elham Rahimi

#### SME Coal & Energy Scholarships – 2019

\* Funded by the AIME Howard N. Eavenson Fund

Daniel Ausherman University of Arizona

Eric Blinkhorn

Trey Campbell

Chase Carroll

Jarom Gleed

Virginia Tech

University of Utah

West Virginia University

West Virginia University

Liniversity of Litah

Selena Lewis University of Utah Suraj Kumar Mahto University of Utah Molly McFarland University of Utah

Alex Norris

National University of Colombia

Nikolas Papameletiou

Chandu Pullooru

Rebecca Ray

National University of Nevada-Reno

West Virginia University

Birsa institute Of Technology

Pranav Singh Sind

Carolina Navia Vasquez West Virginia University

## **AIME Honorary Members**

Honorary Membership is awarded in appreciation of outstanding service to the Institute or in recognition of distinguished scientific or engineering achievement in fields embracing, broadly speaking, the activities of AIME and its Member Societies.

#### **Active List with Year of Election**

2019	Wendell Carter	AIST	2016	Sunil Kokal	SPE
2019	John O. Marsden	SME	2016	C. Shah Kabir	SPE
2019	Korukonda Linga Murty	TMS	2016	Ali Daneshy	SPE
2019	Maria A. Capello	SPE	2016	James R. Arnold	SME
2019	Anuj Gupta	SPE	2016	John N. Murphy	SME
2019	Franklin M. Orr, Jr.	SPE	2016	Siegfried Hecker	TMS
2019	Jeffrey B. Spath	SPE	2016	Dale Heinz	AIST
2019	Ganesh C. Thakur	SPE	2015	Emmanuel Garland	SPE
2018	Christine Ehlig-Economides	SPE	2015	J.J. Azar	SPE
2018	Behrooz Fattahi	SPE	2015	Syed A. Ali	SPE
2018	Joyce Holtzclaw	SPE	2015	Hazim H. Abass	SPE
2018	C. Susan Howes	SPE	2015	Bernt S. Aadnoy	SPE
2018	Mridul Kumar	SPE	2015	Randy Skagen	AIST
2018	Stefan Z. Miska	SPE	2015	Thaddeus Massalski	TMS
2018	Steven Hansen	AIST	2015	William H. Wilkinson	SME
2018	Thomas J. Russo	AIST	2015	Ta Li	SME
2018	Subhash Mahajan	TMS	2014	Mary F. Wheeler	SPE
2018	Tresa Pollock	TMS	2014	Albert C. Reynolds, Jr.	SPE
2018	Drew A. Meyer	SME	2014	Thomas K. Perkins	SPE
2017	Dongxiao Zhang	SPE	2014	S.M. Farouq Ali	SPE
2017	Sidney S. Smith, Sr.	SPE	2014	Ali H. Dogru	SPE
2017	Dean S. Oliver	SPE	2014	Adam T. Bourgoyne, Jr.	SPE
2017	Alexander A. Neyin	SPE	2014	Roderick I. L. Guthrie	SPE
2017	Robert Gordon Moore	SPE	2014	William P. Barker	AIST
2017	Anil Kumar	SPE	2014	David Seidman	AIST
2017	Akhil Datta-Gupta	SPE	2013	Fred I. Stalkup	AIST
2017	William P. Breedlove	AIST	2013	Giovanni Paccaloni	SME
2017	Andrew S. Harshaw	AIST	2013	Medhat M. Kamal	SME
2017	Richard P. Teets Jr.	AIST	2013	Emmanuel O. Egbogah	TMS
2017	Hugh Miller	SME	2013	Kate Hadley Baker	TMS
2017	Art Schweizer	SME	2013	Turgay Ertekin	SPE
2017	Reza Abbascian	TMS	2013	Ali R. Al-Jarwan	SPE
2017	Rohit Trivedi	TMS	2013	Gerald R. Heffernan	SPE
2016	Daniel Moos	SPE	2013	Indira Samarasekera	SPE

## **AIME Honorary Members** (continued)

2013	Bhakta B. Rath	SME	2007	Don W. Green	SPE
2013	Nikhil C. Trivedi	SME	2007	Richard J. Fruehan	AIST
2012	George W. Luxbacher	TMS	2007	Robert E. Murray	SME
2012	Iraj Ershaghi	AIST	2007	Roland N. Horne	SPE
2012	L. Kent Thomas	SPE	2007	Roy H. Koerner	SPE
2012	G. Paul Willhite	SPE	2006	Merton C. Flemings	TMS
2012	Andrew A. Young	SPE	2006	Larry W. Lake	SPE
2012	David E. Laughlin	TMS	2006	Leonard G. Nelson	AIST
2012	Ian Sadler	AIST	2005	Fernando Samaniego-Verduz	co SPE
2011	Yannis C. Yortsos	SPE	2003	Peter D. Gaffney	SPE
2011	Egbert U. Imomoh	SPE	2003	Rajagopal S. Raghavan	SPE
2011	William M. Cobb	SPE	2002	Jacques Bosio	SPE
2011	Theodore F. Lyon	AIST	2002	Edgar C. Capen	SPE
2011	Barbara A. Filas	SME	2002	John P. Hirth	TMS
2010	Eve Sprunt	SPE	2001	W. John Lee	SPE
2010	Fikri J. Kuchuk	SPE	2001	Sadad I. Al-Husseini	SPE
2010	Valery I. Graifer	SPE	2000	Dennis E. Gregg	SPE
2010	Cesare Colamasi	SPE	1998	R. Lyn Arscott	SPE
2010	Ram G. Agarwal	SPE	1998	John K. Hammes	SME
2010	Michael Karmis	SME	1997	Necmettin Mungan	SPE
2010	Raja V. Ramani	SME	1996	Khalid Aziz	SPE
2010	Robert G.H. Lee	AIST	1995	James R. Jorden	SPE
2009	Alan W. Cramb	AIST	1995	Hossein Kazemi	SPE
2009	James P. Brill	SPE	1993	Charles L. Bare	SPE
2009	Abbas Firoozabadi	SPE	1992	Harold W. Paxton	SME, TMS
2009	Alain C. Gringartern	SPE	1992	Frank F. Aplan T	MS, AIST
2008	Dato' Mohamad Idris Mansor	SPE	1992	Alexander McLean	AIST
2008	David K. Matlock	AIST	1990	Michael Prats	SPE
2008	Gary A. Pope	SPE	1989	Arlen L. Edgar	SPR
2008	Kenneth E. Arnold	SPE	1989	Douglas W. Fuerstenau	SME
2008	Robert C. Freas	SME	1988	Edward E. Runyan	SPE
2008	Robert H. Wagoner	TMS	1987	Ben H. Caudle	SPE
2007	David R. Keith	SPE	1973	Harrison H. Schmitt	SME

## **Legion of Honor - 50 Year Members**

Class of 1969

AIME is proud to honor the following people whose membership in the Institute spans a fifty-year period. To all of these people, AIME owes gratitude for their loyalty and appreciation for their faith in its standards. Some have held high office in the AIME ranks and have devoted their time and talents to its continued growth and prestige. They stand to serve as outstanding inspirations for all members.

#### Society for Mining, Metallurgy, and Exploration(SME)

Stuart Havenstrite

Robin Hendrickson

James Hewitson

David Abbott Murray Aitken **Bentley Badgett** William Beck Curtis Belden **David Bennett** William Blackburn Richard Bowen James Bovd William Brice John Callahan Christopher Candee Stephen Collings **Bruce Collins** Charles Cowie Thomas Cushman

Robert Cuttriss

William Everett

John Feddock

William Fincher

**Charles Goehring** 

Thomas Golden

James Graham

Michael Greeley

Ross Grunwald

David Hackman

Howard Harlan

Craig Garrett

Thomas Faddies

R Dewey

John Ellis

Phillip Howard Larry Jaycox Allan Johnson William Kazel Robert Kilborn David Kincaid Dennis Lapoint Kenneth Larsen John Lawlor Bruce Lindeke Fausto Loli Jav Mackie Charles McLean Peter Merritts Robert Murray **David Nicholas** Peter Nielsen Harold Noves Patrick O Hara Bhupendra Parekh **Gregory Patterson** Alexander Paul William Pennell Stephen Peters Paul Pierce John Pollard Jeffrev Reid

Raymond Richardson William Rogers **David Rust** Richard Saccany Randy Sandrik Randolph Schneider David Shaddrick Rohini Sharma Nicholas Skorski Robert Smith William Smith Julio Solano Saez Matthew Spedding Roger Steininger **David Summers** Johnnie Taylor Charles Tesch Pramod Thakur Jack Thompson Edwin Via Robert Wade Philip Wadley Richard Walters Kenneth Wanstrath Frederik Warnaars **David Weiss** Carl Welch David Wells Stephen Winkelmann

Kenneth Woodruff

Allan Young

Michael Richardson

## **Legion of Honor - 50 Year Members** (continued)

#### **Association for Iron and Steel Technology (AIST)**

Jagdish C. Agarwal L. James Anderson Kelso S. Baker Shank R. Balaiee John A. Beatrice Richard B. Bertolo William H. Betts Kenneth E. Blazek David T. Blazevic Gary L. Bowman John R. Buta John C. Campbell Richard J. Choulet C. Larry Coe John P. Connolly Edward C. Cool Denis L. Creazzi Robert Creese **Charles Criss** Roy L. Cross James F. Cunningham Stanley P. Darbut William E. Dauksch Paul J. Diffenbach Thomas F. Dohnal John W. Dresh Sr. James L. Emery

Toshihiko Emi C. Thomas Esterly Bernard J. Fedak Elmer G. Folev John R. Gibson Carl E. Glaser Henry G. Goehring Thomas C. Graham Sr. Roderick I. L. Guthrie James F. Hamilton Lars J. Hansen John G. Harhai Narwani Harman James S. Harper Roger Heaton John D. Heffernan Harry O. Hefter Wallace L. Hick Jr. Lawrence Janowski George A. Jedenoff John E. Jetkiewicz Behram M. Kapadia Calvin A. Keenev Daniel W. Lavis Robert G.H. Lee Edward C. Levy Jr. Timothy Lewis

Louis W. Lherbier Claude H.P. Lupis Leon A. Luyckx Joseph N. Lynch Raymond M. Mader Lawrence G. Maloney William R. Materna John C. McFadden Jr. Raymond J. McGlynn Jr. Alexander McLean Walter D. Melov Keith H. Moredock John L. Mulesa John M. Negomir William J. Nelson Gordon R. Oliver Stephen Palko Prafulla C. Panigrahy K.G. Pedersen Robert D. Pehlke Ronald J. Petroski Howard M. Pielet Raymond L. Polick K. William Rapp Richard L. Reddy Albert H. Riebel Jr. Michel Rigaud

Norman A. Robins Mark S. Rodney Norman F. Rodowicz Gerald J. Roe Walter D. Sadowski Eugene A. Salvadore S.D. Sanders Nobuo Sano Klaus J. Schwerdtfeger Samuel H. Seem Herbert D. Sellers Sr. Sudhir K. Sharma James C. Simmons David B. Simpson Surjit Singh Charles E. Slater Ralph M. Smailer Russell Solomon III Sigurd M. Sorensen George R. St. Pierre Joseph L. Stein Russell E. Swanson Brooks E. Weingart David A. Withrow Michael Wyte

#### The Minerals, Metals & Materials Society (TMS)

Vincent Ben B. Abratigue Bruce A. Barth J.A. Blanco Peter R. Bridenbaugh C. Norman Cochran Takeshi Egami Lorenzo Ferrari Anand M. Garde David B. George Douglas A. Granger Roderick I. L. Guthrie Tadashi Hasegawa Kozo Ishizaki Jerry F. Koon David Y. Ku William J. Mills Robert Minto Lawrence E. Murr Hiro Nori Nakamura Katherine J. Pearsall Joshua Pelleg
Douglas H. Polonis
Garrett C. Schanck
Frederick J. Schottman
Wallace W. Schulz
Richard W. Siegel
William D. Spiegelberg
Donald O. Thompson
D. A. Venkatu
Tadao Watanabe

## **Legion of Honor - 50 Year Members** (continued)

#### **Society of Petroleum Engineers (SPE)**

Carmon H. Alexander

Peter A. Behr

Herbert F. Boles

Fritz Boschitsch

Robert N. Bradford

Donald H. Burks

Ernest L. Buttross Jr.

Samuel J. Byington

Benjamin Coca

Joel E. Damron

Allan L. Drewa

James C. Erdle

Thomas G. Farrell

Walter M. Fast

Hal B. Fullerton IV

David W. Garford

J. Michael Gatlin

Thomas E. Gentry

Richard G. Ghiselin

Ted J. Gilbert Sr.

Robert D. Grace

Ernest L. Grebe II

John F. Greenip

Kenneth L. Haack

Kenneth C. Haggart Jr.

Franklin A. Hamisch

Donald J. Hammerlindl

Florencio Hernandez

Robert C. Herr III

Douglas W. Hilchie

Jack C. Hisaw

Fred R. Holasek

Olin R. Holt

James C. Howell

Rex G. Howell

Edward J. Hrkel

Jim Hussey

Fabian Oritsebemigho

Iwere

Alok Jain

Larry Jay Jenkins

Michael D. Keyes

William M. Kincaid

Larry J. Kinler

Jeff Kirkwood

James A. Kishpaugh

Philip J. Kreick

James F. Lea Jr.

Randal Lewis

Roger D. Linder

James E. Lockwood

Lamar E. Loyd

Joe M. Mach

Edmund J. Mainka Jr.

James S. Martin

Larry D. McVay

Robert S. Metcalfe

Larry O. Miller

Nelson N. Molina

Newton R. Monteiro

John L. Morgan

John A. Musselman

Braj Nandan

James C. New

John W. Norris

James P. Noser

Prentice R. Owen

John E. Peterson Jr.

Glenn A. Picquet

Mahmoodur Rahman

Thomas R. Sifferman

Ashok Kumar Singhal Warner T. Smith

Paul N. Stanton

Jon P. Stephenson

James W. Styler

Phillip W. Terry

Archie Thompson Jr.

David W. Tongue

Ruel Toups Jr.

Russell Harold Trimble

Robert N. Tuttle

**Hugo Vargas** 

Eduardo H. Vila

Leonard West

Paul T. West

H. B. Whitehead

Donald L. Whitfill

John D. Wright

Larry G. Wright



**Financial Statements** 

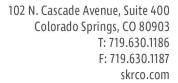
For the Year Ended December 31, 2019

And

**Independent Auditors' Report** 

#### TABLE OF CONTENTS

	Page
INDEPENDENT AUDITORS' REPORT	1
FINANCIAL STATEMENTS AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2019	
Statement of Financial Position	3
Statement of Activities	4
Statement of Functional Expenses	5
Statement of Cash Flows	6
Notes to Financial Statements	7





#### **INDEPENDENT AUDITORS' REPORT**

**Board of Directors** 

American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.

We have audited the accompanying financial statements of American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. which comprise the statement of financial position as of December 31, 2019, and the related statements of activities, functional expenses and cash flows for the year then ended, and the related notes to the financial statements.

#### **Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### **Auditors' Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. as of December 31, 2019, and the changes in its net assets and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Report on Summarized Comparative Information**

We have previously audited American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.'s 2018 financial statements, and our report dated April 24, 2019 expressed an unmodified opinion on those audited financial statements. In our opinion, the summarized comparative information presented herein as of and for the year ended December 31, 2018, is consistent, in all material respects, with the audited financial statements from which it has been derived.

Stockman Kast Ryan + Co. LLP

May 13, 2020

#### STATEMENT OF FINANCIAL POSITION

DECEMBER 31, 2019 (with comparative totals for 2018)

	2019	2018
ASSETS		
CURRENT ASSETS Cash and cash equivalents Inventory Prepaid expenses and other assets	\$ 215,492 13,599 59,396	\$ 144,143 4,296 47,358
Total current assets	288,487	195,797
BENEFICIAL INTEREST IN PERPETUAL TRUST	373,561	332,638
INVESTMENTS	11,777,138	10,124,832
PROPERTY AND EQUIPMENT, NET	938	
TOTAL ASSETS	\$ 12,440,124	\$ 10,653,267
LIABILITIES AND NET ASSETS		
CURRENT LIABILITIES Accounts payable and accrued expenses Member society grants Total liabilities	\$ 102,104	\$ 11,486 20,000 31,486
NET ASSETS Without donor restrictions: Designated for common interest grants, member society direct grants, and 150th anniversary Undesignated	378,026 7,610,647	335,127 6,479,047
Total net assets without donor restrictions With donor restrictions	7,988,673 4,349,347	6,814,174 3,807,607
Total net assets	12,338,020	10,621,781
TOTAL LIABILITIES AND NET ASSETS	\$ 12,440,124	\$ 10,653,267

## STATEMENT OF ACTIVITIES FOR THE YEAR ENDED DECEMBER 31, 2019 (with comparative totals for 2018)

		Without		With		_	
	Donor			Donor			2018
	Re	estrictions	R	estrictions		Total	Total
REVENUE							
Investment income (loss), net	\$	1,342,798	\$	615,245	\$	1,958,043	\$ (570,095)
Offshore technology							
conference fees		284,831				284,831	315,452
Change in beneficial interest							
in perpetual trust				40,923		40,923	(47,146)
Royalties		23,607				23,607	37,587
Contributions				17,080		17,080	18,197
Copyrights and other revenue		2,676				2,676	4,174
Net assets released		404 500		(404 500)			
from restriction		131,508		(131,508)	_		 
Total		1,785,420		541,740		2,327,160	 (241,831)
EXPENSES							
Program services:							
Endowment spending		267,140				267,140	274,908
Strategic initiatives		182,477				182,477	134,629
Grants		13,103				13,103	 32,261
Total program services		462,720		_		462,720	441,798
Supporting services:							
General and administrative		148,201			_	148,201	 135,589
Total		610,921				610,921	 577,387
CHANGE IN NET ASSETS		1,174,499		541,740		1,716,239	 (819,218)
NET ASSETS, Beginning							
of year		6,814,174		3,807,607		10,621,781	11,440,999
o. yeur		J,U17,174		3,007,007		10,021,701	 11,770,333
NET ASSETS, End of year	\$	7,988,673	\$	4,349,347	\$	12,338,020	\$ 10,621,781

## STATEMENT OF FUNCTIONAL EXPENSES FOR THE YEAR ENDED DECEMBER 31, 2019 (with comparative totals for 2018)

				2019						
			Dre	ogram Services				pporting Services		
	dowment pending	trategic nitiatives	FIC	Grants	F	Total Program Services	Ge	neral and ninistrative	Total	2018 Total
Medals, awards and scholarships	\$ 230,097	\$ 48,600			\$	278,697	\$	3,055	\$ 281,752	\$ 262,026
Payroll and employee benefits	26,206	39,759	\$	13,103		79,068		54,909	133,977	125,096
Meetings - external and other	5,403	86,627				92,030			92,030	57,917
Audit, legal and professional service								43,859	43,859	37,443
AIME Board meetings and travel	5,434	3,365				8,799		27,021	35,820	51,247
Supplies, postage, repairs										
and maintenance		62				62		16,719	16,781	17,824
Promotion and advertising		4,064				4,064			4,064	1,500
Insurance								1,705	1,705	1,704
Depreciation								469	469	419
Other	 	 _						464	 464	 22,211
TOTAL	\$ 267,140	\$ 182,477	\$	13,103	\$	462,720	\$	148,201	\$ 610,921	
PERCENTAGE	44%	30%		2%		76%		24%	100%	
TOTAL - 2018	\$ 274,908	\$ 134,629	\$	32,261	\$	441,798	\$	135,589		\$ 577,387
PERCENTAGE - 2018	48%	23%		6%		77%		23%		100%

## STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2019 (with comparative totals for 2018)

		2019	2018
OPERATING ACTIVITIES			
Change in net assets	\$	1,716,239	\$ (819,218)
Adjustments to reconcile change in net assets to net cash			
provided by (used in) operating activities:			
Depreciation		469	419
Realized and unrealized gains and losses on investments		(1,683,861)	818,154
Change in beneficial interest in perpetual trust		(40,923)	47,146
Changes in operating assets and liabilities:			
Inventory		(9,303)	1,623
Prepaid expenses and other current assets		(12,038)	3,312
Accounts payable and accrued expenses		90,618	(15,615)
Member society grants	_	(20,000)	 (628,393)
Net cash provided by (used in) operating activities		41,201	(592,572)
INVESTING ACTIVITIES			
Proceeds from sales of investments		1,516,013	1,200,444
Purchases of investments		(1,484,458)	(745,174)
Acquisitions of property and equipment		(1,407)	 
Net cash provided by investing activities		30,148	455,270
INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS		71,349	(137,302)
CASH AND CASH EQUIVALENTS, Beginning of year		144,143	 281,445
CASH AND CASH EQUIVALENTS, End of year	\$	215,492	\$ 144,143

## AMERICAN INSTITUTE OF MINING, METALLURGICAL, AND PETROLEUM ENGINEERS, INC.

#### **NOTES TO FINANCIAL STATEMENTS**

#### 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations — Organized in 1871, the American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc. (AIME) is a professional not-for-profit organization exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code and is not considered a private foundation under Section 509(a)(3).

AIME's mission is to support its member societies. AIME fulfills this mission by:

- Exercising fiscal responsibility
- Distributing funds
- Facilitating interaction with the relevant scientific and engineering communities
- Honoring the legacy and traditions of AIME

AIME's four member societies are the Society for Mining, Metallurgy & Exploration (SME); The Minerals, Metals & Materials Society (TMS); the Association for Iron & Steel Technology (AIST) and the Society of Petroleum Engineers (SPE). The AIME financial statements do not include the accounts of the four member societies.

The Board of Trustees is made up of an equal number of representatives from each of the member societies.

AIME's significant revenue sources include conference proceeds and investment income. AIME retains 15% of conference proceeds received, and the remaining 85% is distributed to the member societies.

Basis of Presentation — AIME is required to report information regarding its financial position and activities according to two classes of net assets: net assets without donor restrictions, which represents the expendable resources that are available for operations at management's discretion; and net assets with donor restriction, which represents resources restricted by donors as to purpose or by the passage of time and resources whose use by AIME is limited by donor-imposed stipulations that neither expire by passage of time nor can be fulfilled or otherwise removed by actions of AIME.

The accompanying financial statements include certain prior-year summarized comparative information in total. Such information does not include sufficient detail to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with AIME's financial statements for the year ended December 31, 2018, from which the summarized information was derived.

**Cash and Cash Equivalents** — For purposes of the statement of cash flows, AIME considers all highly liquid investments with original maturities of three months or less to be cash equivalents.

**Accounts and Grants Receivable** — Accounts and grants receivable are stated at the invoice amount. Management provides for probable uncollectible amounts through a provision for bad debts and an adjustment to a valuation allowance based on its assessment of the current status of individual accounts. As of December 31, 2019 and 2018, there were no accounts and grants receivable recorded.

**Inventory** — Inventory is valued at estimated cost and consists of minor medals and award items, marketing materials, and office supplies.

**Investments** — Investments in equity securities having a readily determinable fair value and all debt securities and alternative investments are carried at fair value. Investment return includes dividend, interest and other investment income; realized and unrealized gains and losses on investments carried at fair value; and realized gains and losses on other investments.

**Property and Equipment** — Acquisitions of property and equipment of \$1,000 or more are capitalized. Donated equipment is recorded at fair market value at the date of the donation. Purchased equipment is recorded at cost. AIME has property and equipment at a cost of \$5,033 with a net book value of \$938 and \$0 as of December 31, 2019 and 2018, respectively. Depreciation of furniture and equipment is being provided for by the straight-line method over the estimated useful lives of three to seven years.

**Member Society Grants** — When sufficient funds are available as determined by the Board of Directors, 50% of net income is distributed equally to the member societies, and 20% of net income (capped at \$200,000 per year) is allocated to common interest grants (formerly matching grants or collaborative grants). The latter are for overarching programs (programs conducted by two or more member societies that carry out AIME's purpose) upon approval by the Board of Directors. Beginning in 2014, until AIME's 150<sup>th</sup> anniversary in 2021, 50% of the common interest grant allocation will be allocated to fund the 150<sup>th</sup> anniversary. As of December 7, 2018, the AIME Board voted to eliminate future allocations to Common Interest Grants. As of December 6, 2019, the AIME Board changed the member society grants to be \$200,000 per year for the upcoming five years beginning in 2020. Grants are subject to member societies submitting proposals and approval by the AIME Board of Directors.

**Revenue Recognition** — Contributions received are recorded as net assets without donor restrictions or net assets with donor restrictions depending on the existence or nature of any donor restrictions. When a donor restriction is met, net assets with donor restrictions are reclassified to net assets without donor restrictions and reported in the statement of activities as net assets released from restrictions. Conference fees are recognized as revenue once related services are performed or events are held. Grant revenue is recognized when the grant requirements or terms have been fulfilled. Other revenues are recognized when earned.

**Income Taxes** — AIME is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code. AIME believes that it does not have any uncertain tax positions that are material to the financial statements.

**Use of Estimates** — The preparation of financial statements, in conformity with generally accepted accounting principles, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date

of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Subsequent Events** — AIME has evaluated subsequent events for recognition or disclosure through the date of the Independent Auditors' Report, which is the date the financial statements were available for issuance.

#### 2. LIQUIDITY AND AVAILABILITY

The following table reflects AIME's financial assets as of December 31, 2019 and 2018, reduced by amounts that are not available to meet general expenditures within one year of the statement of financial position date because of contractual restrictions or internal board designations. Amounts not available to meet general expenditures within one year include net assets with donor restrictions and board designated funds that are intended to fund special board initiatives not considered in the annual operating budget. In the event the need arises to utilize the board-designated funds for liquidity purposes, the reserves could be drawn upon through board resolution. Amounts not available to meet general expenditures within one year also include net assets with donor restrictions.

	2019	2018
Cash and cash equivalents Investments	\$ 215,492 	\$ 144,143 10,124,832
Total financial assets	11,992,630	10,268,975
Less amounts unavailable for general expenditures within one year, due to:		
Restricted by donors with purpose restrictions	3,542,284	3,041,467
Restricted by donors in perpetuity	807,063	766,140
Total amounts unavailable for general expenditures within one year	4,349,347	3,807,607
Less amounts unavailable to management without Board's approval:		
Board designated for 150 <sup>th</sup> anniversary	178,026	204,411
Board designated for member society direct grants	200,000	
Board designated for common interest grants		130,716
Total amounts unavailable to management without Board's approval	378,026	335,127
Total financial assets available to management to meet cash needs for general expenditures within one year	\$ 7,265,257	\$ 6,126,241

As part of AIME's liquidity management, it has a policy to structure its financial assets to be available as its general expenditures, liabilities, and other obligations come due. AIME's policy to manage an emergency cash flow need is to evaluate actual monthly expenditures and compare with amounts forecasted to determine if the liquidation of investments, release of unrestricted

endowments, or other measure should be taken. Per AIME bylaws, each AIME member society is also responsible for its share of the expenses to support AIME's programs. AIME manages its cash flow for a one-year cycle from the balance sheet date.

#### 3. FUNCTIONAL EXPENSES ALLOCATION METHODS

The financial statements report certain categories of expenses that are attributable to one or more program or supporting services of AIME. Therefore, expenses require allocation on a reasonable basis that is consistently applied. The expenses that are allocated include staff time allocated as 60% program services and 40% general and administrative. Board meeting expenses are allocated as 25% program services and 75% general and administrative.

#### 4. CONCENTRATIONS OF RISK

AIME maintains its cash and cash equivalents in bank deposit accounts which, at times, exceed federally insured limits. AIME has not experienced any losses in such accounts.

AIME has investments in exchange traded funds, common stocks, mutual funds, real estate investment trusts, fixed income securities and private equity limited partnerships which it has placed with an investment management company. AIME invests in investment securities which are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investments will occur in the near term and that such changes could materially affect the recorded amount of investments in AIME's financial statements. AIME's private equity limited partnership investments are recorded at their net asset value as determined by the funds (see Note 6). Actual fair value of the investments upon liquidation could vary significantly from the current estimated fair value.

#### 5. BENEFICIAL INTEREST IN PERPETUAL TRUST

AIME is the sole beneficiary of the Howard N. Eavenson Trust (the Trust), a trust whose principal is to be held in perpetuity. Assets of the Trust are invested and administered by a trustee and distributions are made to AIME. Assets of the Trust consist of cash and cash equivalents and mutual funds. AIME records its interest in the Trust at the fair value of the assets held by the Trust. Fair value of the underlying assets is determined using quoted market prices and pricing services. As of December 31, 2019 and 2018, the beneficial interest in the Trust was \$373,561 and \$332,638, respectively. AIME received \$17,080 and \$18,197 in distributions from the Trust during the years ended December 31, 2019 and 2018, respectively.

#### 6. INVESTMENTS AND FAIR VALUE MEASUREMENTS

AIME is required to use a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy are described below:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities that AIME has the ability to access.

Level 2: Prices determined using significant other observable inputs. Inputs to the valuation methodology include:

- Quoted prices for similar assets or liabilities in active markets;
- Quoted prices for identical or similar assets or liabilities in inactive markets;
- Inputs other than quoted prices that are observable for the asset or liability;
- Inputs that are derived principally from or corroborated by observable market data by correlation or other means.

If the asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Prices determined using significant unobservable inputs.

The investment's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs. The classifications (Level 1, 2 and 3) are intended to reflect the observability of inputs used in the valuation of investments and are not necessarily an indication of risk or liquidity.

Following is a description of the valuation methodologies used for instruments measured at fair value on a recurring basis and recognized in the accompanying statements of financial position, as well as the general classification of such instruments pursuant to the valuation hierarchy.

Common Stocks, Mutual Funds, Exchange Traded Funds, Preferred Securities, and Real Estate Investment Trusts — Fair value is determined principally through quoted market prices in active markets.

*Corporate Bonds* — Price is determined by the asset custodian based on quoted prices for identical or similar assets in active markets.

Private Equity Limited Partnerships — Valued at net asset value of the respective investments as a practical expedient to estimate fair value. This practical expedient would not be used if it is determined to be probable that the investment will be sold for an amount different from the reported net asset value. See below for further information on these investments measured using the net asset value practical expedient.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although AIME believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

The following tables set forth by level, within the fair value hierarchy, AIME's assets measured on a recurring basis stated at fair value as of December 31:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Observable	Significant Unobservable Inputs (Level 3)	Total
2019: Corporate bonds Common stocks Exchange traded funds Cash and cash equivalents Mutual funds Total	\$ 4,171,219 2,395,285 308,147 13,063 6,887,714	\$ 4,410,603	\$ —	\$ 4,410,603 4,171,219 2,395,285 308,147 13,063 11,298,317
Beneficial interest in trust  Total in fair value hierarchy  Investments measured at net	\$ 6,887,714	373,561 \$ 4,784,164	<u>\$</u>	373,561 11,671,878
asset value Total				478,821 \$ 12,150,699
2018: Common stocks Corporate bonds Exchange traded funds Cash and cash equivalents Mutual funds	\$ 3,393,920 2,484,957 250,784 51,059	\$ 3,358,562		\$ 3,393,920 3,358,562 2,484,957 250,784 51,059
Total	6,180,720	3,358,562	\$ —	9,539,282
Beneficial interest in trust  Total in fair value hierarchy	\$ 6,180,720	332,638 \$ 3,691,200	<u>\$</u>	<u>332,638</u> 9,871,920
Investments measured at net asset value				<u>585,550</u>
Total				\$ 10,457,470

The availability of observable market data is monitored to assess the appropriate classification of financial instruments within the fair value hierarchy. Changes in economic conditions or valuation techniques may require the transfer of financial instruments from one fair value level to another.

**Investments Measured at Net Asset Value** — The following summarizes liquidity considerations for investments measured at fair value that calculate net asset value per share as a practical expedient at December 31, 2019:

Investments	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Period	on Term
Private Equity Offshore Fund V Limited	\$ 3,449	\$ 49,995	*	N/A	15 years with three 1-year options begin- ning in 2005
Private Equity Offshore Fund VI Limited	107,196	38,029	*	N/A	15 years with three 1-year options begin- ning in 2007
Private Equity Offshore Fund VII Limited	115,367	73,708	*	N/A	15 years with three 1-year options begin- ning in 2008
Private Equity Offshore Fund VIII Limited	87,910	15,168	*	N/A	15 years with three 1-year options begin- ning in 2011
Private Equity Offshore Fund IX Limited	164,899	25,423	*	N/A	15 years with three 1-year options begin- ning in 2012
Total	<u>\$ 478,821</u>				

<sup>\*</sup> Shareholders do not have the right to redeem any shares without the consent of the fund manager.

Hirtle Callaghan Private Equity Offshore Fund V, VI, VII, and VIII Limited (the Funds): The Funds are exempt companies established under the laws of the Cayman Islands. The objective of the Funds is to realize long-term total returns by investing in a diversified group of pooled investment vehicles, which will, in turn, invest in different private equity-related disciplines, that include, but are not limited to, venture capital, growth capital, buyouts, debt, real estate, mining, energy and infrastructure.

Hirtle Callaghan Private Equity Offshore Fund IX Limited (the Fund): The Fund is an exempt company established under the laws of the Cayman Islands. The objective of the Fund is to realize long-term total returns by investing in a broad range of private equity funds, which will, in turn, invest in different private equity-related disciplines, that include, but are not limited to, venture capital, growth capital, buyouts, debt, real estate, power, energy and infrastructure.

Investment income (loss) consists of the following for the years ended December 31:

	2019	2018
Net realized and unrealized gains (losses) Dividends and interest Other investment income	\$ 1,683,861 321,388	\$ (818,154) 307,554 45
Total Investment advisory fees	 2,005,249 (47,206)	 (510,555) (59,540)
Total investment income (loss), net	\$ 1,958,043	\$ (570,095)

#### 7. TRANSACTIONS WITH AFFILIATES

During the year ended December 31, 2019, AIME remitted \$1,898,400 to the member societies. Of this amount, \$1,620,327 were funds received from the Offshore Technology Conference and passed on to the member societies, \$144,163 were reimbursements to SME for payroll and employee benefits expenses, \$33,497 were expenses paid for strategic initiatives, and the remaining \$100,413 was for awards and scholarships.

During the year ended December 31, 2018, AIME remitted \$4,055,656 to the member societies. Of this amount, \$1,138,398 were funds received from the Offshore Technology Conference and passed on to the member societies, \$105,051 were reimbursements to SME for payroll and employee benefits expenses, \$2,677,086 were 2017 member society distributions paid in 2018, \$37,100 were expenses paid for strategic initiatives, \$22,825 for endowment fund income distributions, and the remaining \$75,196 was for awards and scholarships. As of December 31, 2018, AIME had a payable to the member societies in the amount of \$20,000.

#### 8. BOARD DESIGNATED NET ASSETS

The Board of Directors has designated net assets for the following purposes at December 31:

	2019	2018
150 <sup>th</sup> anniversary Member society direct grants	\$ 178,026 200,000	\$ 204,411
Common interest grants	 	 130,716
Total	\$ 378,026	\$ 335,127

#### 9. NET ASSETS WITH DONOR RESTRICTIONS

Net assets with donor restrictions have been restricted by donors for special projects to be spent as follows at December 31:

	2019	2018
Restricted as to purpose:		
Medals and awards	\$ 1,402,471	\$ 1,206,227
Specific use	1,088,785	946,866
Scholarships	980,386	853,991
Publishing articles, papers and awards	70,642	34,383
Total	3,542,284	3,041,467
Endowments subject to AIME's spending policy		
and appropriation	433,502	433,502
Beneficial interest in irrevocable trusts not subject		
to AIME's spending policy and appropriation	<u>373,561</u>	332,638
Total	807,063	766,140
Total net assets with donor restrictions	<u>\$ 4,349,347</u>	\$ 3,807,607

#### 10. ENDOWMENT

AIME's endowment consists of 21 separate funds with donor-restrictions where only the income may be spent for the charitable purposes stipulated in the related trust documents. As required by accounting principles generally accepted in the United States of America (GAAP), net assets associated with endowment funds are classified and reported based on the existence or absence of donor-imposed restrictions.

The State of New York and the State of Colorado have adopted the *Uniform Prudent Management* of *Institutional Funds Act* (UPMIFA or the Act). The Act provides statutory guidance for management, investment and expenditures of endowment funds held by not-for-profit organizations. AIME has interpreted UPMIFA as requiring the preservation of the fair value of the original gift as of the gift date of the donor-restricted endowment funds absent explicit donor stipulations to the contrary. As a result of this interpretation, AIME classifies as net assets with donor restrictions (a) the original value of gifts donated to the permanent endowment, and (b) accumulations to the permanent endowment made in accordance with the direction of the applicable donor gift instrument at the time the accumulation is added to the fund. In accordance with UPMIFA, AIME considers the following factors in making a determination to appropriate or accumulate donor-restricted endowment funds:

- 1. The duration and preservation of the endowment fund
- 2. The purposes of the institution and the endowment fund
- 3. General economic conditions
- 4. The possible effect of inflation and deflation

- 5. The expected total return from investment income and appreciation or depreciation of investments
- 6. Other resources of AIME; and
- 7. The investment policies of AIME

Changes in endowment net assets for the year ended December 31, 2019 are as follows:

	Without Donor Restrictions	With Donor Restrictions	Total
Endowment net assets, January 1, 2019	\$ 162,23 <u>2</u>	\$ 3,109,961	\$ 3,272,193
Investment return, net	30,322	536,828	567,150
Appropriations for expenditures	(1,061)	(128,431)	(129,492)
Endowments net assets, December 31, 2019	\$ 191,493	\$ 3,518,35 <u>8</u>	\$ 3,709,851

Changes in endowment net assets for the year ended December 31, 2018 are as follows:

	Without Donor Restrictions		With Donor Restrictions		Total	
Endowment net assets, January 1, 2018	\$	170,421	\$ 3,361,327	\$	3,531,748	
Investment return, net		(6,792)	(120,259)	_	(127,051)	
Appropriations for expenditures		(1,397)	(131,107)	_	(132,504)	
Endowments net assets, December 31, 2018	\$	162,232	\$ 3,109,961	\$	3,272,193	

From time to time, the fair value of assets associated with individual donor-restricted endowment funds may fall below the level AIME is required to retain as a fund of perpetual duration pursuant to donor stipulation or UPMIFA. In accordance with GAAP, deficiencies of this nature are reported in net assets without donor restrictions. There were no such deficiencies as of December 31, 2019 and 2018.

Endowment funds are managed by an investment firm according to the Trustees' investment policy, which calls for maximum total return with acceptable risk. The Trustees' spending policy for endowment funds is incorporated in its operating budget policy.

To satisfy its long-term rate of return objectives, AIME relies on a total return strategy in which investment returns are achieved through both current yield (investment income such as dividends and interest) and capital appreciation or depreciation (both realized and unrealized). AIME targets a diversified asset allocation that places a greater emphasis on equity-based investments to achieve its long-term return objectives within prudent risk constraints. Equity-based investments include large-cap, small-cap and international equities. AIME also uses fixed income securities and alternative investments to achieve its objectives.

#### 11. SUBSEQUENT EVENTS

On January 30, 2020, the World Health Organization (WHO) announced a global health emergency because of a new strain of coronavirus originating in Wuhan, China (the COVID-19 outbreak) and the risks to the international community as the virus spreads globally beyond its point of origin. In March 2020, the WHO classified the COVID-19 outbreak as a pandemic, based on the rapid increase in exposure globally.

The full impact of the COVID-19 outbreak continues to evolve as of the date of this report. As such, it is uncertain as to the full magnitude that the pandemic will have on AIME's financial condition, liquidity, and future results of operations. Management is actively monitoring the global situation on its financial condition, liquidity, operations, suppliers, industry, and workforce. Given the daily evolution of the COVID-19 outbreak and the global responses to curb its spread, AIME is not able to estimate the effects of the COVID-19 outbreak on its results of operations, financial condition or liquidity for fiscal year 2020.

Management has taken actions to reduce future anticipated costs and raise funds to sustain its operations for the remainder of fiscal year 2020. In February 2020, AIME sold several oil and gas interests in properties resulting in proceeds of approximately \$500,000. AIME has also applied for the Small Business Administration loan offered in connection to The Coronavirus Aid, Relief, and Economic Security (CARES) Act and intends to apply for a line of credit with a bank for additional funds as needed.



# American Institute of Mining, Metallurgical, and Petroleum Engineers, Inc.

Address: 12999 East Adam Aircraft Circle,

Englewood, CO 80112

Phone: 1-303-948-4255, Fax: 1-888-702-0049

Internet: www.aimehq.org E-mail: aime@aimehq.org

## **Member Societies**







**Society of Petroleum Engineers** 



### **Association For Iron and Steel Technology**

186 Thorn Hill Road, Warrendale, PA 15086 Phone: 724-814-3000, Fax: 724-814-3001

Internet: www.aist.org E-mail: info@aist.org

## Society for Mining, Metallurgy, and Exploration

12999 East Adam Aircraft Circle, Englewood, CO 80112

Phone: 303-948-4200, Fax: 303-973-3845

Internet: www.smenet.org E-mail: sme@smenet.org

## **Society of Petroleum Engineers**

PO Box 833836, Richardson, TX 75083-3836 Phone: 972-952-9393, Fax: 972-952-9435

Internet: www.spe.org

E-mail: postmaster@spe.org

## The Minerals, Metals & Materials Society

5700 Corporate Drive Suite 750, Pittsburgh, PA 15237

Phone: 724-776-9000, Fax: 724-776-3770

Internet: www.tms.org

E-mail: tmsgeneral@tms.org