

 **2016**
ANNUAL REPORT



2016 SME ANNUAL REPORT

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SME's Vision

To be the premier resource and advocate for the mining community we serve



SME's Mission

SME serves professionals in the mining community and supports the advancement of the industry



SME's Core Values

- Members First
- Professional Excellence
- Innovation



SME's Goals

1. SME will provide resources for sustainable professional and educational development programs
2. SME will be the primary resource of fact-based mining and underground construction information
3. SME will improve the perception of the mining industry among the public and key constituents
4. SME will grow membership
5. SME will maintain a financially secure and stable organization
6. SME will nurture a vibrant, engaged global network of local sections



Tim Arnold
2016 SME President

Since safety is our most important job, let me begin this message with some good news. Preliminary data released by the U.S. Department of Labor's Mine Safety and Health Administration (MSHA) indicate that 2016 has the lowest number of mining deaths ever recorded. That is two record low years in a row. We all should be proud of this, and stay focused on continuing the trend.

The job of being the President of SME and my normal "day job" don't have a lot in common, but they do share a few similarities. In my day job, I get up every morning and try and do my best to make my workplace a better place. Similarly, every day of my presidency I have worked with the SME staff in trying to make SME a better Society, and we have had some successes.

Local sections

We have accomplished a lot this last year by working with the local sections. President elect John Mansanti has carried on the work with an ad-hoc committee of local section officers in identifying issues important to local sections, and then identifying how SME Headquarters can assist them with these issues. We had monthly calls with the local section officers, trying to better understand their needs, and to give them feedback on our progress. Some of the initiatives that have been a result of these efforts have been a much increased use of the "Communities" section of the website, which has allowed us to:

- Improve access to national membership lists.
- Archive local section documentation, and assist in the transfer of knowledge.
- Establish best practices repository and system for intra-Section share.

Perhaps the biggest help has been to focus the staff of the head office in assisting the local section leadership, which Dave Kanagy discusses in his annual report. Our intent is for local sections to be served well by the head office, and for them to rely on one another for assistance and advice in running a thriving local section.

International Society of Mine Safety Professionals (ISMSP)

I am very excited about SME acquiring the assets of ISMSP including the Certified Mine Safety Professional (CMSP) program, and how the SME Board and the Health and Safety Division embraced this effort. I am happy for SME, but I am equally happy that all of the health and safety professionals have a home at SME. Every H&S professional I have spoken to is happy about the idea of a national society

that not only offers certification, but networking, programming and establishing a national community.

Resources and Reserve Committee

Sometimes being on a committee at SME is a pretty simple job. Sometimes it is an enormous amount of work. SME's Resources and Reserve Committee this year fell into the latter category, and the work has not stopped. Their 70+ page response to the Securities and Exchange Commission's (SEC) new Industry Guide 7 (IG7) was detailed and exceptional. This group worked thousands of hours trying to protect our industry from onerous stipulations, as well as attempt to bring the IG7 closer to international guidelines. We all owe this committee thanks for their efforts to date, and for the work ahead with the SEC under a new administration.

There have been many other efforts we have spent significant time on this year. Our international efforts have included meetings in Mexico and India to explore collaboration possibilities. We have a strong relationship with Canadian Institute of Mining, Metallurgy and Petroleum (CIM), and are collaborating on the on-line learning program we rolled out via the SME Campus. The Education Sustainability Committee, now a standing committee, is well into its third year of giving out academic grants, and continues to work on other important issues with our collegiate mining programs. The Wallace Library at our offices in Englewood, CO is in great condition, with a wealth of historic mining information available to members. The Foundation had a good year, in spite of a sluggish industry. Our efforts in improving the perception of mining in the public have continued to advance.

Efforts like Move Mining and the Summer of Savings have been embraced and managed by an energetic and invigorated staff at SME. We have always had the good fortune of a hard working staff, and that hasn't changed. Good ideas excite them, and we are reaping the rewards.

The presidency of SME is not just a one-year term, but is a multi-year commitment among the past president, the president, the president elect and the president elect designate (this year: Steve Gardner, myself, John Mansanti and Barb Arnold respectively). I have to thank all of these people for helping me this year, and giving me sage advice. This system works well to bring uniformity and consistency in our ability to achieve our strategic goals.

It has been my honor and privilege to serve as SME President this past year.

As most remember, last year I said that 2015 was a difficult year. Well, 2016 was a more difficult year for the industry and for the Society. Commodity prices continued to lag recent years, some SME members continue to struggle to find work, there seems to be no recovery yet in the capital markets as projects are slowed or eliminated and exploration activities continue to be on hold. Yes, the perfect storm continues but there seems to be more optimism about possible changes in the near future.

On Nov. 7, 2016, significant change was made in the United States with the election of a new administration that is likely to change many aspects of government oversight and regulation. While the impact that the Trump Administration will bring to the mining industry remains to be seen there is hope that mining will be dealt with in a more fair method going forward.

More specifically to the Society, SME has been impacted greatly this year from the slowing trends in the industry. We have lost members and struggled with maintaining a positive financial outcome. Overall, SME membership stood at 13,002 on Dec. 31, 2016. That was a reduction of 11 percent from the prior year. Financially, SME's unrestricted assets totaled nearly \$15 million (up more than \$1 million from the prior year) with more than \$33 million in total assets when counting all of SME's entities. That is an increase of a little more than \$1.3 million from the prior year.

This year, our President, Tim Arnold put a tremendous effort into working with Local Sections. SME has 47 local sections and most local sections are given the opportunity to support their members in the best way possible with monthly, quarterly or annual meetings, golf outings and other activities to keep the mining community engaged in their geographical area. The engagement with Local Sections has included a tremendous number of conference calls with Local Section Leadership, development of micro-sites on the SME Community and further understanding of the needs of SME section members which all end in a greater value for Local Sections. We have also appointed an SME staff person to act as a full-time coordinator to support the Local Section Leadership with Local Sections being a first priority not the fifth item on the "to-do" list. I expect this to enhance communication and collaboration with Local Sections going forward.

World Tunnel Congress

Another first time event was the Underground Construction Association of SME Division hosting the World Tunneling Congress (WTC). The

WTC was held in the United States for the first time in 20 years. The UCA engaged in several meaningful activities that were very unique. At the meeting, all marketing and program material was available in Spanish as well as English, the sessions were translated for attendees to Spanish or English, the General Assembly meetings of the Members Nations were provided in French (the official language of the International Tunneling Association), a *History of Tunneling in the United States* was offered to each conference attendee to the record-breaking crowd of 2,319 people from more than 50 nations. The exhibits totaled nearly 300 booths which was also a record for those attending the program. There were nearly 750 abstracts submitted with only 225 accepted for presentation at the event. The UCA did an outstanding job demonstrating its commitment to the world tunneling community and presenting a program for the industry that exceeded all expectations.

Acquisition of CMSP

SME continues to collaborate with related organizations and during the year, SME was approached by the leadership of the International Society of Mine Safety Professionals (ISMSP) asking for consideration of a merger into the SME Health and Safety Division. ISMSP held the Certified Mine Safety Professional designation along with other industry information. The Health and Safety Division of SME has agreed to purchase a number of ISMSP assets and build a base upon which the Division can build upon to increase membership and SME's recognition as an important provider of value to the mine safety community.

EduMine and CIM

Another collaboration that took place this year was the joint program with EduMine and CIM on the development of a joint on-line learning program. The new SME Campus went live on the SME website on Sept. 21 and now contains thousands of programs that have been peer reviewed by a group of SME and CIM Members to determine their value and learning potential to everyone in the industry.

Industry Guide 7

A significant undertaking continued this year with the release of a new Industry Guide 7 (IG7) from the Securities and Exchange Commission (SEC). SME has some of the world's foremost resource and reserve experts and the SME Resources and Reserve Committee did an excellent job compiling a thoughtful and detailed response to the new pro-

(Continued on page 36)



David L. Kanagy, CAE
SME Executive Director



Timothy Arnold
2016 SME President
Pershing Gold



John Mansanti
SME President Elect
Intrepid Potash



J. Steven Gardner
Past President
ECSI LLC



David L. Kanagy
Secretary
and Treasurer
SME



John D. Wiebmer
Director
Retired



Ross R. Bhappu
Director
Resource Capital
Funds



William W. Edgerton
Director
McMillen/Jacobs
Associates



William A. Warfield
Director
Consultant



Robert Washnock
Director
Consultant



Michael Myers
Director
Baldor Electric



Barb Arnold
2018 President
Designate
PrepTech



Ronald Parratt
Incoming Director
Renaissance
Exploration Inc.



Mary Poulton
Incoming Director
University of Arizona

Strategic Committees

Nominating Strategic

Timothy D. Arnold
SME President and Chair, Pershing Gold

John Mansanti
SME President-elect, Intrepid Potash

Corby Anderson
Colorado School of Mines

William Edgerton
McMillen Jacobs Associates

Robert Reisinger
CH2M Hill

William Warfield
Consultant

Catherine Joyner
Minetech USA

Richard Johnson
Johnson MCS, LLC

Structure and Governance

William Warfield
Chair, Consultant

Ronald Parratt
Renaissance Exploration

David Tyler
Coeur Mining

Joseph Zelanko
Rosebud Mining

Anne Williamson
Twin Metals Minnesota LLC

Joseph Driscoll
AMEC

Cory Stevens
Freeport-McMoRan

Outreach Strategic

Robert Washnock
Chair, Project manager

Lia Walker
Freeport-McMoRan

Gregory Beckstrom
American Engineering Testing

Terry Lamy
Mosaic Company

JoAnna Robertson
Freeport-McMoRan

Products and Services

John Wiebmer
Chair, Caterpillar Inc. Retired

Holly Bellmund
US Silica Co

Robert Reisinger
Arcadis

Todd Parker
ArrMaz

Pamela Wilkinson
University of Arizona

Brett Rabe
Mr. Crane Inc.

Abani Samal
GeoGlobal

Education and Professional Development

Michael Myers
Chair, Baldor Electric Co

Timothy Hilderman
Minova

Thom Seal
University Nevada-Reno

Matt Blattman
Blattman Brothers Consulting

Jamal Rostami
Penn State University

Martin Barry
Colorado School of Mines

Christopher Noble
West Virginia University

Finance Strategic

Mark LeVier
Chair, Great Western Minerals Group

Ross R. Bhappu
Chair, Resource Capital Funds

Gordon Stevens
Patrick Engineering Corp.

Brad Atkinson

Robert Schafer
Eagle Mines Management

Richard Diaz
Minemax

Richard Johnson
Johnson MCS, LLC

The Government and Public Affairs Committee (GPAC) continued to work diligently to raise the political profile of SME as a fact-based, non-partisan, technical mining resource to regulatory agencies, members of Congress and their staff by: participating in professional society meetings and Congressional briefings in Washington, D.C.; submitting regulatory comments to federal agencies on proposed rules affecting the mining industry; submitting correspondence to Congress in support of, and in opposition to, specific legislation (within the limits of SME's 501 (c)(3) status); meeting with, and continuing to be a resource for, the staffs of the House Natural Resources Committee and Senate Energy and Natural Resource Committee, among others.

Technical papers

GPAC issued one technical briefing papers in 2016, bringing the total number published to 17:

- The Mining Industry and Sustainable Development

Proposed topics for technical briefing papers for 2017 include: Endangered Species Act, Legacy Mines Sites/Acid Drainage/AML-Bonding Issues, and Mining & Renewable Energy.

Congressional Fellowship program

Due to pressures on the global mining industry and on the Society, SME will suspend the popular Congressional Fellowship program for 2016-2017. It is hopeful that the program can be reinstated in 2017-2018 to continue the valuable work of having a mining industry professional on Capitol Hill that can offer their services to Congressional Committees and individual offices. SME current Congressional Fellow, Kevin Ashley, had to cut short his term in D.C. due to personal issues he had to attend to at home in California. Ashley made significant strides in his 10 months in D.C working for Rep. Alcee Hastings (D-FL), who is on the House Rules Committee. In this position, Ashley helped review all bills that made their way to the House floor for votes.

In a related matter, GPAC is considering managing the Congressional Fellowship program itself rather than through the American Association for the Advancement of Science (AAAS), which places academic restrictions on the candidates that apply. AAAS requires Fellows to have a Ph.D. in any science or a Masters in engineering. This restricts the academic background of candidates from the SME membership whose terminal degree is usually a Masters, as well as prohibits geologists, mineral processors or other non-engineering professionals from applying. If the Congressional Fellowship program is continued in 2017-2018, this issue will be

addressed at that point.

Industry Guide 7

In May, GPAC staff met, along with the National Mining Association (NMA) and Newmont Mining Corp. representatives, the general counsel and one of the U.S. Securities Exchange Commission (SEC) Commissioners to discuss their concerns with the replacement of Industry Guide 7.

In June, the SEC issued a Notice of Proposed Rulemaking to replace Industry Guide 7 on reserve reporting. This much anticipated rulemaking was the result of SME's original Petition for Rulemaking filed in 2012 and the continued political and administrative pressures applied to the SEC by SME to issue the proposal. SME's comments, requesting the U.S. resource and reserve reporting rules be amended to align with those of the rest of the world, were submitted to the Commission on August 3. A final rule could be expected before the end of the year.

Mining legislation

In July, Josh Hoffman, SME's former Congressional Fellow and now full time professional staff on the Energy and Mineral Resources Subcommittee, reported that the full Committee on Natural Resources was taking up three mining bills that address abandoned mine cleanup. These include the Mining Schools Enhancement Act, that Hoffman helped draft. All three bills passed the Committee and could move to floor votes.

The SME Resources and Reserves Committee met in July 2016 to consider the SEC's proposed replacement for Industry Guide 7: "Modernization of Property Disclosures for Mining Registrants." The Committee prepared a 63-page response which while acknowledging the SEC's acceptance of new disclosure standards based on the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) template, found the proposed implementation of the standards to be unduly prescriptive and onerous in terms of specification of commodity prices based on a 24-month backward average and rigid disclosure tables that were unsuited to companies with a large portfolio of mineral properties, such as those engaged in sand and gravel, industrial minerals and coal.

In addition the SME Resources and Reserves Committee felt that the Qualified Person's liability was unusually broad in that there was no provision for disclaiming liability for reliance on experts in areas that a mining professional could not be expected to practice. SME publically filed its response on August 4, 2016, with a short addendum being filed on August 16. Going forward, SME will continue to collaborate with NMA and NSSGA to forward a reasonable guide for industry.

SME Membership found a significant challenge with dips in several mining sections in 2016, and had a year-end membership of 13,002, 1755 fewer members than in 2015.

The successes in 2016 include the addition of several new student chapters including the first SME student chapters established in Brazil and Germany. SME currently has 53 student chapters in the United States, Canada, Mexico, Ecuador, Peru, Chile, Columbia, the Netherlands, India, Australia, Africa, Iran, Brazil and Germany.

The creation of the new Health & Safety Division at SME will lead to additional membership opportunities. At the midyear meeting in Las Vegas, the SME Board of Directors approved the acquisition of the Certified Mine Safety Professional (CMSP) and Mine Safety Professional (MSP) programs from the International Society of Mine Safety Professionals (ISMSP). This acquisition will allow membership to invite the former ISMSP membership to transition over to SME for new member benefits and to maintain their professional credentialing.

SME exhibited at several events during 2016 in

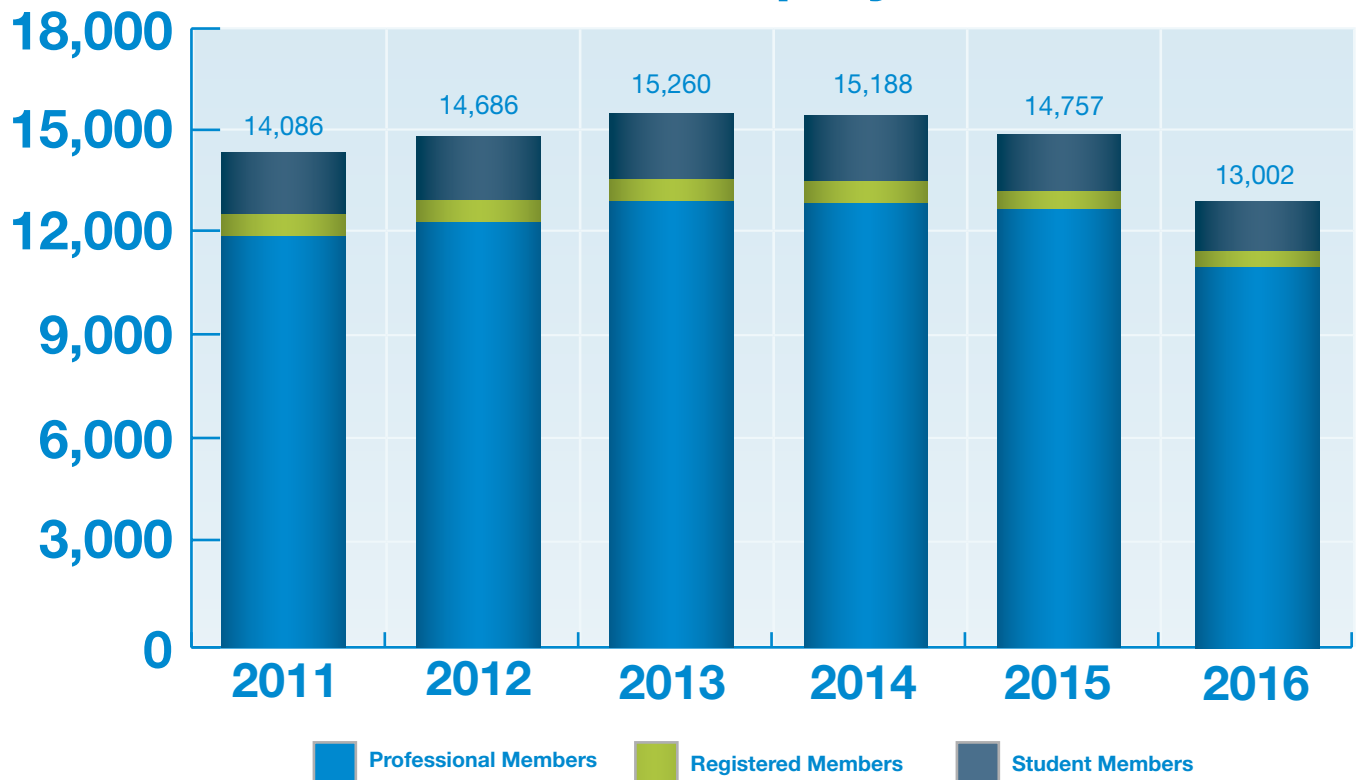
the United States and Canada to promote its signature products and services. These included SME memberships, SME-sponsored conferences and short courses, the SME bookstore, *Mining Engineering* magazine and the OneMine.org digital library.

In 2016, SME had a membership retention rate of 86 percent. In 2017, more emphasis will be placed on lead generation, lead management, and recruiting and retention. The intent is to build a qualified prospect database, talk to prospects about relevant topics and increase retention year-over-year.

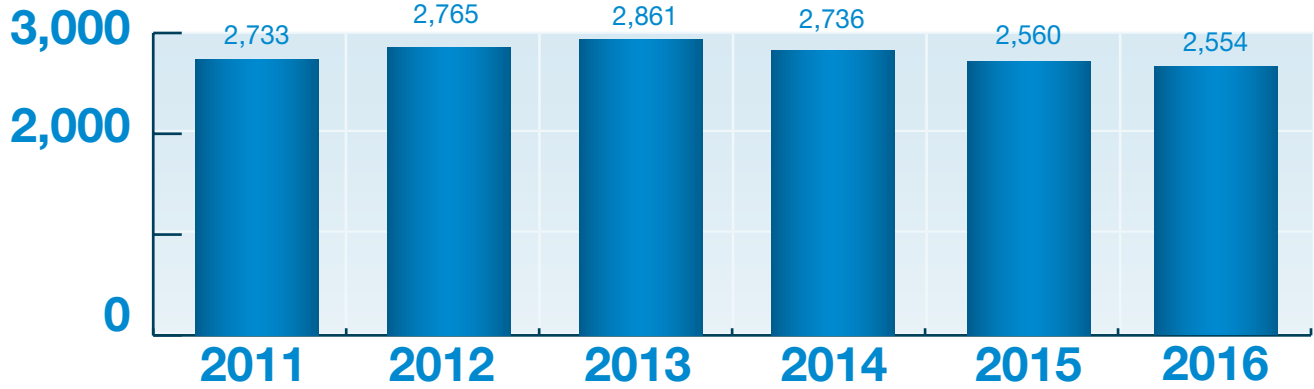
The Membership Department has been challenged to grow membership to reach 20,000 members by the year 2020. New tactics, tools and techniques will be added to serve both an aging membership and a younger, tech-savvy population.

Membership outreach will include continued presence on social media, a new affinity program, and updated new member orientation webinar. Direct mail, advertising and digital marketing will also be used, with a primary goal of driving awareness to landing pages and the website where they can learn more and have a positive membership experience.

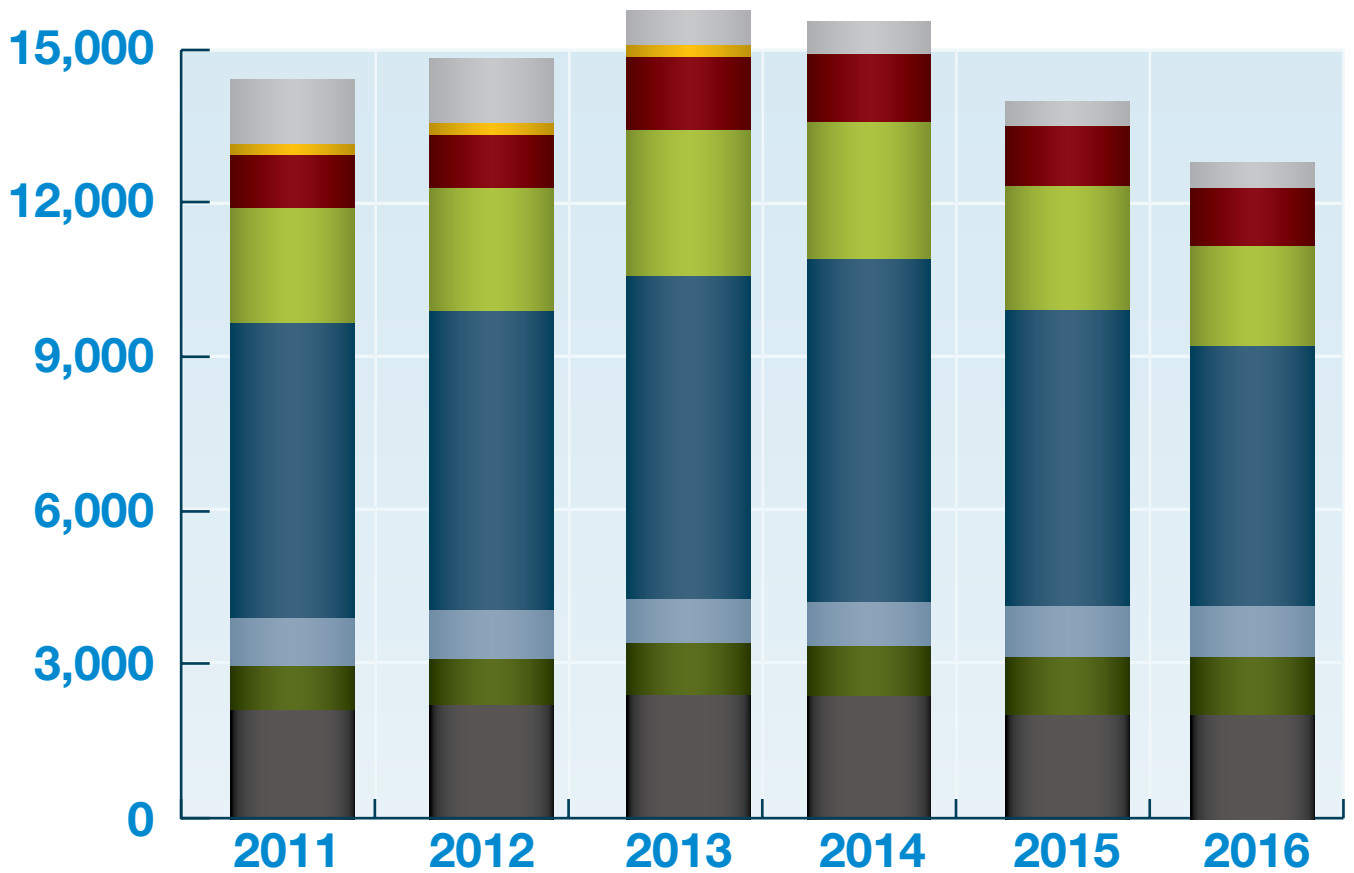
Membership by Grade



International Members



Membership by Division



Legion of Honor Members

Richard Addison, Greenwood Village, CO
 Mark Anderson, Reno, NV
 Gregory Austin, Reno, NV
 Eric Beinlich, Woodbury, MN
 David Beling, Grand Junction, CO
 Fred Brackebusch, Kellogg, ID
 Robert Burnham, Arvada, CO
 Terrence Chatwin, Salt Lake City, UT
 Dennis Clark, Strawberry Plains, TN
 Kenneth Clark, El Paso, TX
 William Coughlin, Cascade, ID
 Steven Davis, Evergreen, CO
 Andres Duarte V., Caracas, Venezuela
 Robert Dunn, Viburnum, MO,
 Milton Gere, DeWitt, MI
 Kraig Grubaugh, Blackfoot, ID
 Glenn Gruber, Auburndale, FL
 Timothy Haddon, Denver, CO

Denis Hall, Yachats, OR
 William Hirt, Salt Lake City, UT
 Oscar Kempff B., LA Paz, Bolivia
 Danny Kirschman, Percy, AR
 Gary La Chapelle, Claypool, AZ
 Robert Larson, Ouray, CO
 John Lawrence, Thompson Falls, MT
 Mel Lawson, Mesa, AZ
 Fred Madden, City Beach, WAS, Australia
 Kent McGrew, Congress, AZ
 James McGuigan, Golden, CO
 David Meissner, Charlotte, NC
 Paul Metz, Fairbanks, AK
 David Morris, Seattle, WA
 F. Niggemyer, Fremont, OH
 Robert Phillips, Golden, CO
 Raja Ramani, University Park, PA
 James Rasmussen, Globe, AZ

Jose Rivera, Cordoba, Argentina
 Robert M. Robb, Albuquerque, NM
 David Roberts, Westminster, CO
 Robert Scharp, Monument, CO
 Glenn Scott, Marquette, MI
 Albert Seep, Englewood, CO
 Roger Smith, Kanab, UT
 Charles Speltz, Lakewood, CO
 Alan Stagg, Cross Lanes, WV
 Jackie Stephens, Tucson, AZ
 John Sturgul, Adelaide, SA, Australia
 J. Sund, Glen Innes, NSW, Australia
 Robert Thomas, Washington, PA,
 John Thompson, Stevensville, MT
 James Toole, Tucson, AZ,
 Nikhil Trivedi, Easton, PA
 William Verrette, Iron Mountain, MI
 Robert Zerga, Lamoille, NV



In 2016, SME President Tim Arnold led the continuing effort to support the 2014 SME Board's strategic objective to renew and enhance the emphasis on developing and engaging the SME local sections around the world. To achieve that objective, SME volunteer leadership and SME staff worked together to strengthen the relationship with local section leadership by providing support and resources. There are currently 47 active local sections around the world of which four are international sections in Peru, Philippines, Mexico, and Mongolia.

Local Section Task Force

Led by President Elect John Mansanti, the Task Force is made up of Section leadership Gen Bodnar (St. Louis, MO Section), Patrick Williamson (Mexico Section), David Bieber (Colorado Section) and William Warfield (Northern California Section).

The group is addressing several issues:

1. Working with SME staff to provide the needed support and resources to local sections.
2. Developing appropriate governance guidelines for local sections.
3. Offering support to local sections to reorganize and/or grow their membership.
4. Providing resources for local sections to organize section documents and share information with future leadership.

The Krumb Lecture Series

SME helps bring outstanding speakers to the Local Sections through the Henry Krumb Lecture Series. The program is offered to all local SME sections to enhance their appreciation and understanding of important new methods and technologies. The 2016 Program Committee selected, and the SME Board approved, ten Henry Krumb Lecturers. The lecturers and their topics are:

- Dr. Sean Dessureault — *Using tablets, Internet of things beacons, and big data analytics for safety and productivity in small mines and quarries.*

- Donald Ewigleben — *Is it still possible to permit a major new mining project in the United States?*
- Donald Hulse — *International social license in mining projects.*
- Dr. Ihor Kunasz — *The lithium paradigm.*
- Kramer Luxbacher — *Comparisons of novel fiber optic to standard heat of combustion methane sensors in a coal mine.*
- Moe Momayez — *Distributed air properties sensors for underground mine.*
- Dr. Aaron Noble — *Micro-Pricing: The value of trace rare earth elements in coal and coal byproducts.*
- Dr. Ebrahim Tarshizi — *Simulation and animation of Marigold Mine with dynamic pit operation.*
- Dr. Stan Vitton — *Aggregate materials response to high strain rate testing.*
- Joshua Werner — *Modeling and validation of electrowinning to facilitate operational optimization.*

Local section grant program

In 2016, \$15,500 was awarded to local sections through SME's Local Section Grant program. The purpose of the SME Section Grant program is to support its local sections, and by extension, the industry. The program offers financial support to qualifying sections to fund specific, one-time projects, including production of outreach material, professional development products and services, and educational programs.

Sections at the SME Annual Conference

A local section luncheon was scheduled for the 2017 SME Annual Conference & Expo (ACE) in Denver in February. Leaders of local sections were invited to attend to learn best practices and share success stories with other local section leadership.

SME recognizes outstanding achievement at the student chapter level by honoring the top contestant in its Outstanding Student Chapter Contest. Chapters submit annual reports that are then used to evaluate the level and quality of chapter activities and operations. The major aim of the chapter was to encourage the students from various disciplines to join the society.

2016 Student Chapter Membership Challenge

The 2016 SME Student Chapter Fall Membership Challenge was considered a success. Student chapters recruited and renewed more than 700 student members.

SME online mentor program

Currently there are 103 active mentor/mentee relationships, 79 connections awaiting acceptance, 116 completed relations that ended in 12/2016. In 2016 there were 390 mentor and mentees active in the Online Mentor Program.

New chapters

Eight new student chapters were added to SME in 2016. The chapters are Universidad Cesar Vallejo - Trujillo, Peru; Technische Universitaet Clausthal - Zellerfeld, Germany; Univ Federal Do Rio Grande Sul - Porto Alegre, Brazil; Universidad Nacional Santiago Antunez De Mayolo - Huaraz, Peru; Universidad Cesar Vallejo - Trujillo, Peru; Universidad Nacional Del Centro Del Peru - Huancayo, Peru, Universidad Nacional Jorge Basadre Grohmann - Tacna, Peru, and Univ Pedagogica Y Tecnologica De Colombia (UPTC).

Outstanding student chapter contest

Winner: Indian Institute of Technology – ISM Student Chapter of SME

First Runner-up: TU Delft University of Technology, Student Chapter of SME

Second Runner-up: University of Petroleum & Energy, Norwood Student Chapter of SME

Third Runner-up - Iron Range Engineers, Student Chapter of SME

SME Student Chapters

University of Alaska	Pontificia Universidad Catolica De Chile
University of Arizona	Queens University
Colorado School of Mines	Universidad Nacional De Ingenieria
Colorado School of Mines UCA	University of British Columbia
Federal Univ of Technology Akure	Universidad Autonoma De Chihuahua
University of Kentucky	Universidad De Chile
Michigan Tech University	Universidad Cesar Vallejo *
Minnesota State Univ-Iron Range Engineering	Universidad Federal Do Rio Grande Sul *
University of Missouri-Rolla	Universidad Nacional Del Centro Del Peru *
Montana Tech of the University of Montana	Universidad Nacional Jorge Basadre Grohmann *
University of Nevada-Reno	Univ Pedagogica Y Tecnologica De Colombia (UPTC) *
Nacional Universidad de Apurimac Micaela Bastidas	Universidad Nacional De Colombia
Pennsylvania State University	Universidad Nacional De Moquegua
South Dakota School of Mines & Technolgy	Universidad Nacional Santiago Antunez De Mayolo *
Southern Illinois University	San Agustin National University - Arequipa
University of Utah	Universidad Nacional De Altiplano
Virginia Polytech Institute & State University	Pontificia Universidad Catolica Del Peru
West Virginia University	Stockton College of NJ
University of Minnesota	Technische Universitaet Clausthal *
University of Minnesota Duluth	Escuela Superior Politecnica Del Litoral
Universidade Federal De Minas Gerais (Brazil)	New Mexico Institute of Mining and Tech
Universidad Nacional Mayor De San Marcos	University of New South Wales
Delft University of Tech	Middle East Technical University
Tehran Polytechnic University	Iron Range Engineering
Indian Institute of Technology	Universidad Nacional de San Antonio Abad del Cusco - Peru
University of Petroleum & Energy Studies *	* Chapter added in 2016
Indian School of Mines	
Laval University	

Armando Alatorre, México, DF, Mexico	Steve Fiscor, Jacksonville, FL	Danial Marshall, Henderson, NV
Michael Alber, Bochum, Germany	Julian Fisher, Tempe, AZ	Al Mauer, Spring Creek, NV
Mark Albertsen, Gold Canyon, AZ	Bill Fleshman, Reno, NV	Matthew Mengel, Dunedin, New Zealand
Mark Alspaugh, Lakewood, CO	Sharon Fry, Sandersville, GA	John Muller, Hillarys, WAS, Australia
Emmanuel Amakye, Tucson, AZ	Matt Gallimore, York, PA	Joshua Olmsted, Morenci, AZ
Corby Anderson, Golden, CO	Anthony Gentile, Scituate, MA	Mike Packer, Riverton, UT
Gordon Babcock, Saint Albans, VT	Lee Gochmour, Aberdeen, WA	Ed Picard, Arvada, CO
Fred Banta, Louisville, CO	Daniel Gorski, Rockport, TX	Donn Pillmore, Kanab, UT
Steve Barnwell, Dayton, NV	Paul Gottlieb, Brno, Czech Republic	Pamela Pinson, Bayard, NM
Cesar Basilio, Sandersville, GA	Alejandro Guerra, Greenwood Village, CO	Randall Reisinger, York, PA
Douglas Bayer, Coeur D Alene, ID	John Gunnett, Harrisburg, PA	Gary Righettini, Seaview, WA
Tom Beck, South Pasadena, CA	John Gustavson, Boulder, CO	Steven Ristorcelli, Gardnerville, NV
Steve Bellini, Bluefield, WV	Levi Guzman R., Lima, Peru	Gary Rivenes, Gillette, WY
Dino Bertoldi, Waihi, New Zealand	Ronald Hager, Thayne, WY	Garret Ross, Sandia Park, NM
Rahul Bhaduri, Moraga, CA	Donald Hanak, Lake Havasu City, AZ	Luke Russell, Hayden, ID
David Bickford, Ankara, Turkey	James Hendrix, Greenwood, NE	Eugene Schmidt, Clinton, WA
Raul Borrastero, Brighton, CO	Christopher Hickey, Reno, NV	Joel Schneyer, Parker, CO
Grant Brackebusch, Silverton, ID	Monte Hieb, Summersville, WV	Juergen Schoenherr, Zittau, Germany
Jack Bradford, Globe, AZ	Maurice Hindle, Kamloops, BC, Canada	William Seibert, Morenci, AZ
Jonathan Brown, Reno, NV	Stephen Horn, Port Clinton, OH	Joseph Seymour, Spokane Valley, WA
H. Gassaway Brown, Reno, NV	Mku Ityokumbul, University Park, PA	Steven Shadow, Parker, CO
Gregory Bruce, Carlsbad, NM	Stewart Jackson, Winterhaven, CA	Michael Sierakowski, Saint Paul, MN
Michael Bunch, Tucson, AZ	Garry Keizer, Elko, NV	Thomas Simonetti, Canonsburg, PA
John Carden, Liberty Lake, WA	Robert Kellie, Reno, NV	David Sjomeling, Carlsbad, NM
Tony Casagrande, Tucson, AZ	Jeffery Kelly, Manchester, KY	Joseph Sottile, Lexington, KY
Anthony Cook, Tucson, AZ	Dennis Kennedy, Buford, GA	Sean Stewart, Brisbane, QLD, Australia
Joao Costa, Porto Alegre, Brazil	S. Murthy Khandrika, College Park, MD	Cristian Strickler, Phoenix, AZ
Steven Cotten, Lockport, NY	Jonathan King, Salt Lake City, UT	Edward Sutich, Wallace, ID
Jack Crosswell, Hibbing, MN	Melvin Klohn, Spokane Valley, WA	Tim Thamm, Bremond, TX
Mark Davic, Canonsburg, PA	John Korolsky, Pima, AZ	Sam Thong, Stirling, WA, Australia
John Devon, Chesterfield, MO	Richard Kramer, Rock Springs, WY	Ward Thurman, Woodland Park, CO
Sergei Diakov, Vancouver, BC, Canada	Robert Ladendorff, Nampa, ID	Mark Tieszen, Spearfish, SD
Manuel Diaz, Lima, CO, Peru	Jonathan Lang, Tucson, AZ	Jochen Tilk, Saskatoon, SK, Canada
Alex Doll, Logan Lake, BC, Canada	Zhongxue Li, Beijing City, China	Ross Tilson, Wahroonga, Nsw, Australia
James, Dunne, Surprise, AZ	Arthur Lind, Hibbing, MN	Louie Tonc, Huntington, UT
Robert Eaton, Canning Vale South, WAS, Australia	Janna Linebarger, Spring Creek, NV	Edgar Urbaez, Cardiff, United Kingdom
Ronald Eberhart, Woodridge, IL	Mark List, Elko, NV	Robert Vrabel, New Hyde Park, NY
Jorge Falla, Lima, Peru	Robert Loranger, Elko, NV	Asa Weber, Blacksburg, VA
Matthew Fein, Florissant, CO	Rick Magstadt, Greybull, WY	W. Wightman, Hernando Beach, FL
Jesus Figueroa, Tucson, AZ	Jon Maki, Hibbing, MN	Chris Witty, Buffalo, WY
Steven Finley, Green River, WY	Thomas Mancuso, Reno, NV	Dave Young, Pleasanton, CA
	Michael Marksberry, Overland Park, KS	

George A. Fox Conference

The 2016 George A. Fox Conference was held on Jan. 26, 2016, at the CUNY Graduate Center in New York, NY. There were a total of 375 attendees, 25 gold sponsors, three silver sponsors and four bronze sponsors. The keynote speaker was Leon Jacobs, and the focus was on New Tunneling Technologies. The 2017 George A. Fox Conference was held on Jan. 24, 2017.

SME Annual Conference & Expo

The 2016 SME Annual Conference & Expo was held on Feb. 21-24, 2016 at the Phoenix Convention Center in Phoenix, AZ. There were 6,294 attendees and 842 exhibit booths. Of the 6,294 attendees, there were 680 international attendees and 502 student attendees. A total of 602 exhibits booths were pre-sold at the 2015 Annual Conference. The 2016 SME Annual Conference & Expo was sponsored by 39 companies. Freeport-McMoRan was the overall conference sponsor.

Other events that were held in conjunction with the 2016 Annual Conference were:

- Four short courses
- Young leader mentoring session and lunch
- Young leaders field trip
- Spouse/guest brunch
- New member orientation
- Rising professionals reception
- WAAIME members and scholarship recipient reception
- SME Foundation Dinner
- 1st Annual Health & Safety Division 5k Fun Run
- Field trip to United Verde Copper Mine reclamation project and the historic district of Jerome, AZ
- Student field trip sponsored by Freeport-McMoRan

SME Minnesota Conference

SME National managed the 2016 SME Minnesota Conference. The conference was held in Duluth, MN on April 11-13, 2016. This was the second time SME has managed this long-running conference. Highlights included two days of technical

programming, three short courses and multiple networking opportunities. There were a total of 963 attendees. The exhibit hall featured 150 booths. SME National will be managing the SME Minnesota Conference again April 17-19, 2017.

World Tunnel Congress (WTC) 2016

The WTC was held at the Moscone Center in San Francisco, California April 22-28, 2016. There were a total of 2,131 attendees and 226 exhibit booths. The WTC was sponsored by 23 companies.

SME Florida Conference

SME National managed the 31st Annual FLSME Regional Mining Conference in Lakeland, FL on Oct. 11-12, 2016. This was the second year of SME's management of the event. The conference featured two days of technical programming, a field trip to the CEMEX Davenport Sand Mine, and multiple networking opportunities. The final registration count was 379, including both attendees and exhibitors.

Cutting Edge

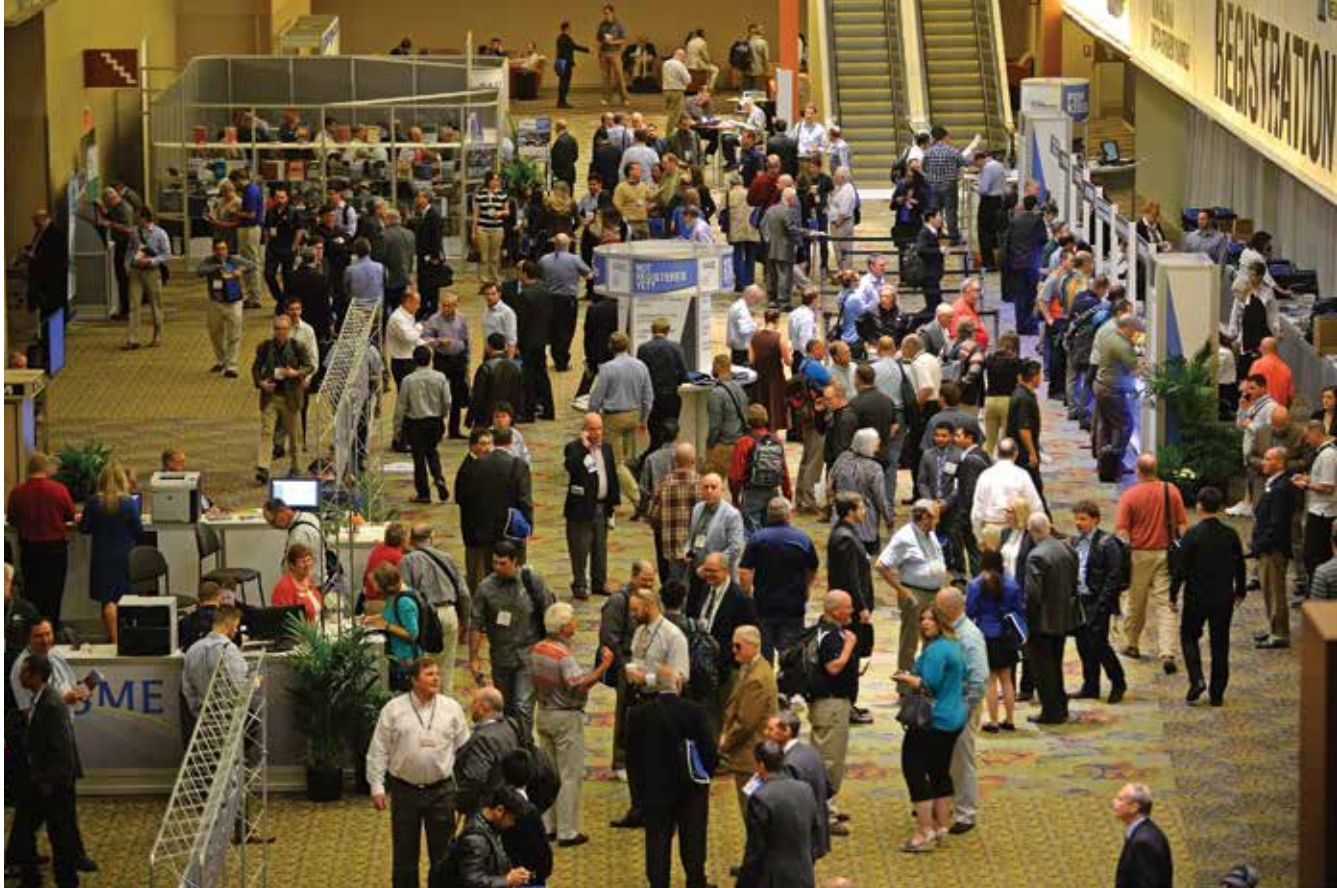
The theme for the 2016 Cutting Edge Conference was Advances in Tunneling Technology. It was held Nov. 6-9, 2016, at the Hyatt Regency Los Angeles International Airport in Los Angeles, CA. Featuring a field trip to the LA Metro – Crenshaw/LAX Transit Project, the conference had 225 attendees.

SME Arizona Conference

The Arizona Conference was held on Dec. 4-5, 2016 at the JW Starr Pass Resort in Tucson, AZ. Continuing the tradition of the "mining weekend," the concept includes a reception for the Mining Foundation of the Southwest, the section golf tournament and the Arizona Conference. Attended by 440 participants, the conference had 17 companies participate as sponsors or exhibitors. The next Arizona Conference is scheduled for Dec. 3-4, 2017, in Tucson again at the JW Marriott Starr Pass Resort.

P.E. Review course

SME held a multi-day Review Course for the Professional Engineer (P.E.) Examination of Mining/Mineral Processing Engineers Sept. 10-14, 2017. The event was held at the Grand Hyatt Denver in Denver, Colorado. The review course attracted 31 attendees and featured instructors from Pennsylvania State University, University of British Columbia, West Virginia University, and the Colorado School of Mines.



2017 SME Meetings

George A. Fox Conference

Jan. 24, 2017, Graduate Center, City University of New York, NY

SME Annual Conference & Expo

Feb. 19-22, 2017, Phoenix Convention Center, Denver, CO

SME Minnesota Conference

April 17-19, 2017, Duluth Convention Center, Duluth, MN

Rapid Excavation and Tunneling Conference

June 4-7, 2017, Manchester Grand Hyatt, San Diego, CA

Mining Finance

May 1-4, 2017, Shearman & Sterling's Convention Center, NY

67th Annual Colorado MPD Conference

May 4-6, 2017, The Broadmoor, Colorado Springs, CO

International Conference on Ground Control

July 24-27, 2017, Lakeview Resort, Morgantown, WV

SME Arizona Conference

Dec. 3-4, 2017, JW Marriott Starr Pass Resort, Tucson, AZ

Mining Engineering (ME) is SME's flagship publication. Now in its 69th year, the magazine provides SME members the latest in innovative technological information aimed at helping mining professionals to do their jobs more efficiently.

In addition to ME, the Society publishes *Tunneling & Underground Construction* (T&UC), the publication of the Underground Construction Association of SME. The content of this quarterly publication is geared toward the underground construction and tunneling professional. Current and archived issues of ME and T&UC are available to members online.

Minerals & Metallurgical Processing (M&MP) is an SME peer-reviewed publication. The magazine is published quarterly and is subscription-only. M&MP's content is directed at professionals in the minerals processing field. In addition, the annual *Transactions* volume contains all peer-reviewed papers published in ME and M&MP, as well as several not published in either magazine.

Mining Engineering

In addition to regular feature articles and peer-reviewed technical papers, content in *Mining Engineering* during 2016 included several special editorial sections. Included were special sections on coal, industrial minerals, minerals processing, exploration, autonomous mining, surface and underground mining and haulage, aggregates, and underground and surface haulage equipment. Two special sections on mining in Canada were also published.

The January and February issues of *Mining Engineering* included the SME Annual Conference Showguide. The April issue included the SME Publications Catalog. May was the exploration annual review issue. July featured the annual review of more than 40 industrial minerals and construction materials and aggregates.

Mining Engineering's website, launched in 2012, includes mining industry news stories, updated daily, a commodities ticker and feature articles that are not published in the print version. An advertising program was developed for the new website. Current and archived issues of *Mining Engineering* are available to SME members to read or download.

SME News

Topics in the SME News section of *Mining Engineering* include Legion of Honor members, SME/AIME award winners, calls for award nominations, SME division officer nominations, the Young



Leaders Committee, the Henry Krumb lecturer program, division scholarship award winners and an end-of-the-year index. The section also covers student chapter news, local section news, the SME Foundation (including the professional licensure of engineers and the Minerals Education Coalition), division newsletters, ABET updates and AIME news. Monthly departments include personal news, obituaries, necrology and new members.

Tunneling & Underground Construction

Tunneling & Underground Construction (T&UC) is published four times a year, in March, June, September and December. Although the magazine is geared toward the underground construction industry, it is sent to all SME members. Each issue



of *T&UC* is bound into *ME* but is also mailed as a stand-alone magazine to every UCA of SME Division member.

T&UC's content includes technical articles concerning major tunneling projects throughout the world. Articles are written by underground construction professionals. In addition to a general project feature, each issue of *T&UC* carries editorial material geared toward certain projects, technologies, equipment or types of tunneling. In addition to feature articles, shorter underground construction technology news articles are geared to the theme of each issue.

Other sections include the UCA of SME chairman's column, industry news items, new products, and underground construction events and short courses.

The Tunnel Demand Forecast (TDF) remains one of *T&UC*'s most popular sections. An updated TDF is published in each issue. The TDF is also available on the UCA of SME website (www.uca.smenet.org). Listings published in each issue of *T&UC* also appear on the online version. And users can submit their own projects for listing on the TDF.

SME's graphic designer is currently developing a redesign of the magazine that should be ready for 2018. In addition, plans are in the works for a redesign of *T&UC*'s web page. The goal is to make the publication more interactive, allowing the editors to post timely news items and online exclusive feature articles.

Minerals & Metallurgical Processing and Transactions

Minerals & Metallurgical Processing (M&MP) is published quarterly in February, May, August and November. The journal is a subscription-only publication. Each issue is typically 54 to 64 pages in length and contains from six to 10 peer-reviewed technical papers. The publication of *M&MP* began in 1984, and 2016 is Volume 33.

S. Komar Kawatra, professor at Michigan Technical University, performed the duties of Editor-in-Chief for 2015. During 2015, 29 peer-reviewed papers, totaling 240 pages, were published in *M&MP*. The February, May and August 2015 issues were special focus issues on gold processing, iron ore processing and coal processing.

During 2016, 27 peer-reviewed papers, totaling 230 pages, were published in *M&MP*. The November 2016 issue was a special issue on process development testing.

Seventeen technical papers, totaling about 150 pages, will appear in *Transactions*, Vol. 340, for the year 2016. This total includes the index and papers not published in *Mining Engineering* or *Minerals & Metallurgical Processing*. *Transactions* will also contain the technical papers published in *Mining Engineering*, which numbered 21 and totaled 129 pages, and those published in the quarterly *Minerals & Metallurgical Processing*.

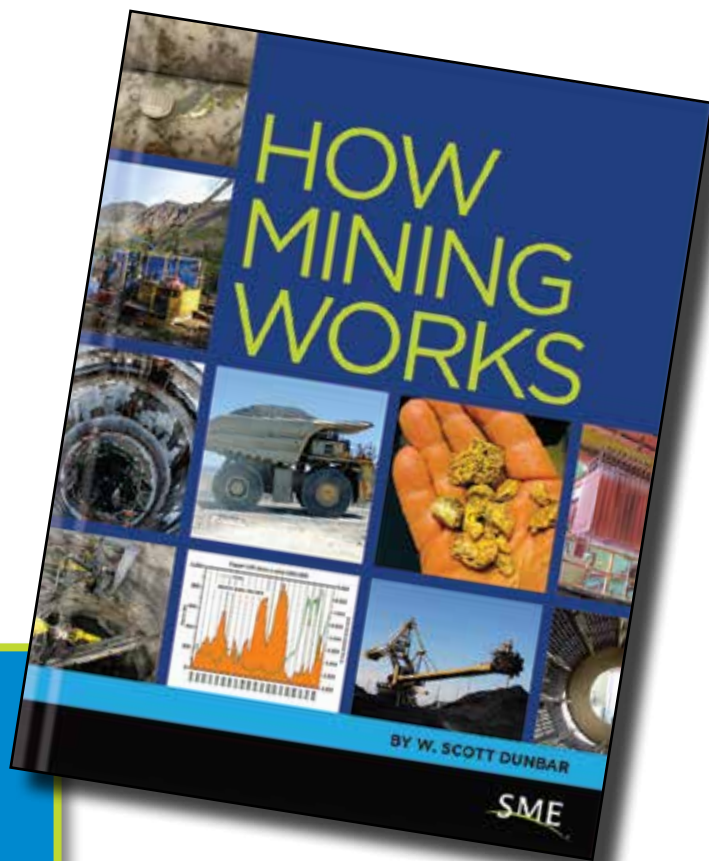
Beginning with the 2011 volume, the *Transactions* volume became available for purchase in electronic form only.



SME continues to be a leader in the publication of technical books for the mining and underground construction industries.

During 2016, SME produced four new books and acquired four titles from other publishers. In 2017, the Society hopes to publish 10 new books.

The SME Bookstore continued to travel during 2016. Attendees at several industry conferences were able to purchase SME books at the SME Annual Conference, the Prospectors & Developers Association of Canada conference, Minexpo and the World Tunneling Conference.



Titles published in 2016

Beneficiation of Phosphates: Comprehensive Extraction, Technology Innovations and Advanced Reagents

Edited by Patrick Zhang, Jan Miller, Ewan Wingate, and Laurindo Leal Filho

How Mining Works

by W. Scott Dunbar

Study Guide for the Professional Licensure of Mining and Mineral Processing Engineers, 8th edition

Edited by SME PE Committee

World Tunneling Congress: 2016 Proceedings

By WTC Program Committee

Titles acquired in 2016

Gold Ore Processing: Project Development and Operations, 2nd Edition

by Mike Adams

Mineral Economics and Policy

by John E. Tilton and Juan Ignacio Guzman

Mineral Processing Design and Operations, 2nd Edition

by Ashok Gupta and Denis Yan

Mountain Movers: Mining Sustainability and the Agents of Change

by Daniel M. Franks

Top sellers in 2015

1. World Tunneling Congress: 2016 Proceedings
2. SME Mining Engineering Handbook (Book, CD, Set)
3. Project Management for Mining
4. Beneficiation of Phosphates
5. Underground Mining Methods
6. How Mining Works
7. Chemistry of Gold Extraction
8. SME Mining Reference Handbook

SME continued to increase its presence on a number of social media platforms, making the Society accessible to members around the world.

In 2016, SME saw growth in most social media platforms. SME now boasts 15,073 Facebook fans, 28,875 LinkedIn members and 5,149 followers on Twitter.

SME Community 2015 totals:

Web pages viewed 137,063 (+13% from 2015)
 Unique Logins 4,509 (+117% from 2015)

SME Twitter (@SMEcommunity):

5,149 followers (+774 from Jan. 2016)
 Between January & February 2016, our tweets had over 141,400 views. (+75% from 2015)

SME LinkedIn group:

28,875 members (-160 from Jan. 2016)
 SME Company page 4,429 3,535 followers (+894 from Jan. 2016)

SME Google+ page:

258 following our page (+16 from Jan. 2016)

SME YouTube Channel:

1,998 video views in 2016 (-57.33% from 2016)

SME Facebook page:

15,073 fans (+1,774 from Jan. 2016)

Communications numbers for 2015

Press releases:

42 press releases about “all things SME”
 Most popular: SME Releases 2016 Minerals Baby, SME 2017 Photo Contest, Invitation to Media to attend SME Annual Conference & Expo

ENews:

21 issues of SME eNews sent to all SME members
 Four issues of UCA of SME eNews sent to all UCA members

Media Contacts:

991 media contacts currently receive weekly press releases.

SME Facebook Insights : Snapshot

Total Likes ?
15,073 ↑ 13%

Facebook Insights : Likes by Region



Countries	Likes
United States	2,188
India	1,781
Peru	1,565
Indonesia	1,501
Pakistan	862
Iran	552
Egypt	531
Turkey	493
Canada	422
South Africa	369
35 more countries	3,711

Webinars:

Number of sessions: 16
 Number of attendees: 767

Most popular webinars:

UCA Webinar: Microtunneling in Hard Rock and Mixed Face Conditions
 UCA Webinar: Underground Blasting Technology & Risk Management
 Fundamentals of Professional Ethics: Elements and Examples

Coal & Energy

Robert Kudlawiec
2016-2017 Coal & Energy Division Chair

The Coal & Energy Division membership as of Dec. 31, 2016 is 1,599. This reflects a decrease of 399 members from the total of 1,998 members in 2015.

Scholarships

The executive committee voted during the mid-year meeting that the scholarship fund amount awarded was to be increased by \$5,000 this year to give more money to students in the coal & energy division. This increase will be reviewed for continuation in 2017. It was also noted during the review of scholarship applications that there were a few students who had very similar statements of need submitted possibly suggesting a method to gain more financial assistance from scholarships by embellishing the family's hardship.

Division Bylaws

The committee brought up the discussion on updat-

ing the division bylaws which were last updated in 2009. Final revisions are being sent out for approval by the Executive Committee with a plan to submit them to the Structure and Governance Committee and finally the Board of Directors for approval at the 2017 Annual Conference.

2017 Annual Conference Programming

Manoj Mohanty reported that there are currently 27 sessions scheduled for the 2017 SME Annual Conference – the largest amount of any of the divisions. There are currently 166 abstracts submitted.

C&E Luncheon for the 2017 Annual Meeting

Robert Kudlawiec has confirmed Dr. Jessica Kogel will be the keynote speaker at the luncheon.

Fundraising

Barb Arnold suggested that we conduct a 50/50 raffle drawing during the C&E Luncheon in 2016 which brought in \$1,162. It was agreed upon by the executive committee to bring back the silent auction in 2017, along with the 50/50 raffle to help increase scholarship donations.



Robert Kudlawiec
2016-2017 Coal & Energy
Division Chair

Environmental

Patrick Gorman
2016-2017 Environmental Division Chair

The Environmental Division's membership as of Dec. 31, 2016 is 1,037. This reflects an decrease of 43 members from the total of 1,080 members as of December 31, 2015.

2016 Actions

- Bylaws change - An amendment to Article VII, Amendments, Section 1 was put forth and approved. The change will allow the Division to announce proposed changes in *Mining Engineering* magazine or on the SME website. The intent of this change was to provide consistency and transparency to the bylaw amendment process.
- Created a website for the ADTI-MMS/SME Environmental Division Joint Strategic Committee which is hosted by SME and maintained by Committee members.

- Two papers were selected at the 2016 Annual Meeting for the Outstanding Paper Award(s):
 - o Pilot testing of a permeable reactive barrier (PRB) to remediate sulfate, metals and low pH in groundwater; Robert Legrand, Yunzhou Chai, James Strunk Jr., David Blowes, Jeff Bain, Richard Henry, Karen Maestas.
 - o ASTM standardization of gold ICPMS method for mining influence waters; Charles Bucknam, James Lorengo.

Scholarship Program

The Environmental Division's 2016 Silent Auction, chaired by Robert Mongrain, generated \$3,892 in income for the Division's Scholarship Fund. Veolia Water Technologies will donate \$2,000 for a scholarship again. Parson's Brinckerhoff will make a one-time \$2,000 donation for an additional scholarship this year. This makes a total of 6 scholarships possible for the 2016-2017 year.



Patrick Gorman
2016-2017
Environmental Division
Chair



Thomas Hethmon
2016-2017 Health & Safety Division Chair

Health & Safety

Thomas Hethmon
2016-2017 Health & Safety Division Chair

2017 Conference

The Health and Safety Division is expected to conduct 12 technical sessions with more than 72 papers. This does not include safety and health related technical session sponsored by the other divisions. The division is also sponsoring a short course titled 'operational risk management.' At the division's annual award breakfast three awards will be presented. The guest speaker for the breakfast will be Bruce Watzman, Senior Vice President for Regulatory Affairs for NMA.

New developments

Through its outreach efforts, the Division is acquiring two certification programs from the International Society for Mine Safety Professionals (ISMSP). The Certified Mine Safety Professional (CMSP) and Mine Safety Professional (MSP) will be managed through a new oversight committee. Also, the division completed its first strategic plan.

Membership

Division membership was 118 in at the end of 2016. The majority of this growth was from new members to SME. With the addition of the CMSP and MSP certifications, division membership from current and former ISMSP member is expected to increase significantly in 2017 and beyond.

Bylaws

Division bylaws are being revised to accommodate the addition of the CMSP and MSP programs as well the new certification oversight board and the addition of new standing committee to help manage Division growth and activities.

Fundraising

At the end of 2016, division funds totaled \$2,289.

The Division will host its second annual fun run on Feb. 20. In 2016 the run raised \$2,030 from registrations, in 2017 the run is expected to attract more participants.

With the addition of the certification programs, revenue is expected to be substantially higher in 2017.



Jerry Gaunt
2016-2017 Industrial Minerals & Aggregates Division Chair

Industrial Minerals & Aggregates

Jerry Gaunt
2016-2017 Industrial Minerals & Aggregates Division Chair

As of Dec. 31, 2016, the Industrial Minerals & Aggregates Division had 910 members. This is a membership decline of 184 members from December 31, 2015.

Midyear Meeting

Webinar series and short course topics were discussed. The transition of the Event Committee, an ad hoc committee, into a permanent committee of the Division to facilitate organization and conduct of the webinars series, short courses and silent auction was discussed.

2016 Year-End Accomplishments

The following should also be noted as key year-end accomplishments for the Division:

- Executive Committee conference calls were held throughout the year discussing relevant Division business.

- Three luncheon sponsors were secured for the 2017 Annual Division Luncheon. Golder Associates (\$2,500), Imerys (\$2,500) and R.E. Janes Gravel Company (\$2,000).
- The speaker for the 2017 Annual Division Luncheon will be Ariel Hill-Davis, Director of Industry Affairs, Industrial Minerals Association – North America (IMA-NA).
- A raffle at the luncheon instead of an auction to raise money for the scholarship fund was organized by the Division.
- Nine technical program sessions with 50 speakers were organized.
- The 2016 Technical Committee had 44 minerals reviews with a good response from the authors.

2016-2017 Scholarship Recipient

The Division has awarded the 2016-2017 Gerald V. Henderson Memorial Scholarship for \$3,000 scholarship to Caroline Dziak from Missouri University of Science and Technology. Caroline will be recognized at the 2016 Annual Luncheon.

Mineral & Metallurgical Processing

Mark Jorgensen
2016-2017 Mineral & Metallurgical Processing Division Chair

The Mineral & Metallurgical Processing Division's membership as of Dec. 31, 2016 was 1,967. This reflects a decrease in membership of 429 members from Dec. 31, 2015.

Technical Programming

The MPD has scheduled 15 technical sessions including one Plenary Awards Session as well as a Student Poster Session that will be fully sponsored and awarded by MPD.

SME Committees

The MPD Executive Committee contacted members who have been assigned to various committees, assuring their attendance and soliciting a short oral or written report on the outcomes of their committee meetings at the annual conference.

MPD Mission

With the help of the Membership Committee and SME personnel MPD conducted a survey to determine if the organization is meeting the needs of its members.

The results of the survey indicated that the MPD fulfills the needs of the members by:

- Organizing a highly attended technical program
- Providing other technical information in the form of additional technical programming and publications
- Sponsoring scholarships and recruitment of young engineers

Rong Yu Wan PhD Dissertation Award

The Rong Yu Wan Award will be managed by the Scholarship Committee. Once the Award recipient has been determined, the Technical Program Coordinator will work with the Scholarship Committee Chair to place the award-required presentation into a technical-appropriate session, with suitable acknowledgement at the session.

Extraction 2018

MPD committed to participate with a slate of speakers in Extraction 2018 in Ottawa, Ontario, Canada on August 26-29. Extraction 2018 is a combination of different conferences and will include Hydrometallurgy 2018 of which SME is an organizing member. MPD will organize a special session on Sulfide Flotation.



Mark Jorgensen
2016-2017 Mineral & Metallurgical Processing Division Chair

Mining & Exploration

James Humphrey
2016-2017 Mining & Exploration Division Chair

As of Dec. 31, 2015, the Mining & Exploration Division had 4,777 members.

Programming for 2017 Annual Meeting

There are 25 sessions, 142 submissions expected for 2017 Annual Meeting. Final adjustments will be completed over the next few months.

There was an attendee survey completed in May that focused on programming. There is a plan to repeat the survey and develop training material for new session chairs.

Programming for 2018 Annual Meeting

Brad Atkinson is the 2018 Chair and organized three of four PAMs for 2018 Annual Meeting. He is still looking for Geology PAM for 2018 in Minneapolis.

MEANC committee charter

General discussion on charter and goals were discussed at the SME Midyear Meeting to ensure they are in line and in order. There was a discussion on the best place to document the charter, as it is currently covered in the By-Laws. Discussion will be continued at the SME Annual Conference.

Update on changes to award committee structure

The approved by-law updates associated to award committee structure were reviewed. New awards structure requires two at-large members and com-



James Humphrey
2016-2017 Mining & Exploration Division Chair

mittee will have to inform award recipients they are responsible to participate.

Global Mining Standards and Guidelines Group (GMSG)

Joe Driscoll is still sitting in on monthly meetings with group under an ad-hoc committee with overall SME. SME will continue to review their path forward. This item will be removed from the agenda going forward and covered under the SME board meeting.

By-Law and Handbook update

By-laws were updated and approved. They are published on the SME website. The adhoc committee for the Handbook plans to finish before the annual meeting.

Other business

Discussion was undertaken regarding safety concern at conference and expo displays, specifically unguarded moving displays. Jim Humphrey has raised awareness with SME staff Board of Directors



Arthur Silber
2015-2016 UCA of SME
Division Chair

UCA of SME

Arthur Silber 2015-2016 UCA of SME Division Chair

Total membership in the Underground Construction Association of SME (UCA) during 2016 was 1,061. Of that, 964 were professional members, 41 associate members, 10 retired/legion/ exempt, 170 corporate and sustaining individuals, 11 registered members and 86 student members.

The UCA had the honor and privilege of hosting the World Tunneling Congress (WTC) 2016 on April 22-27, 2016 in San Francisco, CA. Many “lessons learned” from previous WTC events were used to successfully engage 2,319 individuals from 54 countries in many programs and activities. This event had a record number of attendees with the largest exhibit ever held for a WTC. Attendees came from more than 15 countries.

The event included short courses, technical sessions, plenary sessions, an exhibit of products and services, working group meetings, general assembly meetings, social activities and committee meetings for both ITA and UCA. The location of the event was attractive to those from outside the United States, which we believe encouraged greater attendance.

There were a number of unique activities and implementation of new technologies and products to ensure a timely and valuable event. The WTC 2016 program book was made available in both English and Spanish. The technical sessions also provided a simultaneous translation so that presentations could be made in and listen to in both languages.

A program was developed that allowed an invita-

tion to students from various universities to attend the WTC and be exposed to the tunneling industry. More than 100 students applied, with a final attendance of 43 conference scholarship recipients accepted. The feedback on this program for those that participated was very positive. A highly successful poster presentation program supported the podium presentations. 168 poster presentations were presented during the event. The space, location, and time allotted to this event was well planned and executed.

Goal 3 of the UCA’s Strategic Plan is “Improve the effectiveness and efficiency of the Underground Construction Industry. That goals’ committee met monthly for more than a year before developing its initial deliverable and then (and now) meeting as needed. During its tenure, the committee has examined numerous ways in which UCA could improve its effectiveness and efficiency. Initially, the committee created a series of surveys for the industry. Those surveys included asking industry professionals to define what certain terms they felt were critical to the committee’s task and purpose, as well as to rank the importance of certain needs. The committee took the results of those surveys and reviewed and analyzed the data. After extensive discussion and analysis, the committee incorporated its proposals into a white paper that is being circulated between members. The committee was scheduled to meet at the end of January/early February to finalize the white paper. The white paper will likely provide three primary recommendations: publication selection process guidelines/recommendations; safety committee for underground construction; and suggestions related to improving educational programming.

WAAIME

Jean Davin

2016-2017 WAAIME Division Chair

Significant time and effort has been expended planning for our 100th Anniversary Celebration, to take place at the 2017 SME Annual Conference & Expo in Denver, CO. All of the universities that normally hold alumni receptions at the Annual Conference agreed to co-locate their events with WAAIME.

Associated with the 100th Anniversary Celebration WAAIME worked with SME and AIME to prepare an oral history video to help fill some of the gaps since publication of "The National History of the Women's Auxiliary to the AIME" which documents WAAIME history from 1917 to 1973.

In December, WAAIME was honored by the Mining Foundation of the Southwest with its 2016 Special Citation at the 34th annual American Mining Hall of Fame Awards Ceremony in Tucson, AZ.

The WAAIME portfolio is now exceeds \$8.3 million, up about 9 percent above this same time last year.

In 2016, WAAIME authorized scholarships to deserving student members in the United States, Peru, Chile and Mexico. We received 136 acceptable scholarship applications from students in the United States for which the Executive Committee approved \$183,200 for distribution. In addition, \$50,000 was directed to the international sections in Peru, Chile and Mexico for distribution to international student members.

The 2016 WAAIME/Women of SME Breakfast was held at the 2016 SME Annual Conference & Expo in Phoenix and was attended by more than 90 women.

WAAIME held its Silent Auction in a booth in the Exhibit Hall in 2016 instead of in the SME headquarters hotel. The Silent Auction raised nearly \$2,200, the proceeds of which are distributed to local sections to support their programs and activities.



Jean Davin

**2016-2017 WAAIME
Division Chair**

2016 WAAIME Scholarship Recipients

Arizona State University

Alexander Colburn

Colorado School of Mines

Alexandra Anderson, Amin Azhari, Thomas Boundy, Danielle Campos Rocha, Brett Carlson, Seth Fredrick, Sumedh Gostu, Kamran Jahanbakhsh, Halley Keevil, ZohairKhademian, Sul-Ki Lee, Samuel Lolon, Zarifa McIntosh, John Meyer, Benjamin Ntumba, Muthu Vinayak Thyagarajan, Kun Zhang

Michigan Technological University

Soheila Nazari

Missouri University of Science and Technology

Charles Abbey, Jacob Brinkman, Katherine Burke, Eric Gbadam, Carlos Grosso, Patrick Heywood, Shishay Kidanu, Joe Mersinger, Mahdi Mohammadighaleni, Stanley Nwokebuihe, Hayden Pearson, Abigail Pfaff, Elizabeth Shuman, Elnaz Siami-Irdemoosa, Lane Singleton

Montana Tech of the University of Montana

Stephen Broddy, Ben Schubert, Logan Ward

New Mexico Institute of Mining and Technology

Andrew Gabrysiak, Zeyu Gu, Fatemeh Molaei

Northeastern University

Mahboobeh Rezaeeyazdi

Pennsylvania State University

Sidharth Agrawal, Diana Fernandez, Gireesh Subramaniam Sankara Raman

South Dakota School of Mines & Technology

Scyller Borglum, Manoj Keerthipati, Garrett Mack, Kristina Miles, Devin Rowe

Southern Illinois University at Carbondale

Batjargal Altangerel, Benjamin Butcher Gopi Bylapudi

Texas A&M University - Kingsville

Nebechi Osia

University of Alaska Fairbanks

Blaze Brooks

University of Arizona

Dongbo An, Upasna Chandarana, Alyssa Hom, Hamidreza Jalilian, Jing Liu, Mohammad Hadi Mehranpour, Levi Willard, Yan Xing

University of Kentucky

Clayton Berkemeier, Gabriel Bode Jimenez, Jinxiang Chen, Qingqing Huang, Emily Invergo, Ashish Kumar, Lifeng Li, Christopher Newman, Abhinav Sharma, Xinbo Yang, Wencai Zhang

University of Minnesota - Twin Cities

Emily Erhart

University of Nevada-Reno

Micah Claypoole, Naci Duru, Jennifer Jorgensen, Brian Minkin, Ralston Pedersen

University of Oklahoma

Rachael Campo, Christopher Winkler

University of Utah

Mark Austin, Casey Cloward, Greg Krumel, Justin Lawrimore, Brad Munns, Avyette Richardson, Matthew Robison, Breanna Sanders, Matthew Savas, Annaleigh Seeley, Kaustubh Shrimali, Kyle Spaulding, Vu Truong,

Virginia Polytechnic Institute and State University

Lucas Rojas Mendoza, Britt Cupp, Daniel Facchina, Sarah Gaillard, Daniel Rowles, Timothy Lambert, Robert Bennett, Adam Beissner, Brooks Morrison, Ali Haghghat, Hannah McNeal, Jennifer Doggett, Charles Jones, Kevin Moreland, Ryan Harvey, Samuel Akinyemi, Kent Phillips

West Virginia University

Rachel Boothby, Neel Gupta, Mehdi Rajaeabaygi, Jennifer Smith



Dennis Bryan
2015-2017
SME Foundation
President

SME Foundation

The mission of the SME Foundation is to be the source of funding for education and outreach of SME and the community it serves.

As 2016 comes to a close, I want to thank all of the corporate and individual donors to the SME Foundation (SMEF). This last fiscal year, FY2016, has been an exceptional one as the SMEF broke the \$2,000,000 contribution barrier for the first time. In addition, the Foundation has collected just over \$500,000 for the first quarter of FY2017. Because of our donors' generous contributions and the countless hours of volunteerism by SME members and the Foundation Trustees and staff, SMEF continues to be strongly positioned to assist in facing our industry's challenges in the coming years. During 2016, SMEF continued to pursue several new initiatives and looks forward to assisting SME members in their future educational and developmental needs.

Three-quarters of all SME Foundation funding comes from corporate support. Companies giving over \$25,000 annually belong to the Corporate Roundtable Partnership (CRP). SMEF would like to thank the current CRP for their continued support of the industry and SME members:

- Freeport-McMoRan Inc. (\$200K)
- Newmont Mining Corporation (\$100K)
- Alliance Resource Partners, LP (\$50K)
- Joy Global (\$50K)
- Rio Tinto/Kennecott Utah Copper, LLC (\$50K)
- Fluor (\$50K)
- Royal Gold Inc. (\$50K)
- Mining & Metallurgical Society of America (\$40K)
- Caterpillar Inc. (\$25K)
- Bechtel Corporation (\$25K)
- Cloud Peak Energy (\$25K)
- Kinross Gold USA (\$25K)
- Vulcan Materials Company (\$25K)

Restructuring of the SMEF this past year has paved the way for more streamlining and focusing

of fundraising activities. New bylaws have also been adopted. An endowment fund has been established for both the ABET and PE programs which, when fully funded, will assure the continuance of these two core programs into the future. The Campaign Steering Committee is now the Corporate Giving Committee that strives to consist of members who have corporate contacts within the mining industry. The Individual Fundraising Committee has been created to foster donor relationships and steward SME members. Increasing support to the Foundation programs is imperative to our program's success.

The Ph.D. Fellowship and Career Development Grant program continues on its mandate to support the rebuilding of the U.S. mining schools faculty pipeline. That success includes current 2016 support of two \$100,000 per year Academic Career Development Grants to Associate Professors:

- Charles K. Kocsis, University of Nevada-Reno
- Andrea J. Brickey, South Dakota School of Mines

and three \$60,000 Ph.D. Fellowship grants to graduate students:

- Gail L. Heath, University of Arizona
- Richard M. LaDouceur, Montana Tech
- Penny L. Padgett, Missouri Science & Technology

These grants allow recipients to continue their academic goals to serve and educate the next generation of mining engineers and metallurgists so that our industry may continue to prosper and meet the demands for the future. The program has been primarily funded by support from:

- Caterpillar Global Mining
- Freeport-McMoRan Inc. (exclusive funding of the Academic Career Development Grants)
- Kinross Gold

- R. Gene Dewey
- Robert Shoemaker
(exclusive funding of one Ph.D. Fellowship Grant per year)
- Royal Gold
- Scott McIntosh Fund
- Seeley Mudd Fund
- Robert Shoemaker Family
- Will and Pam Wilkinson

Great thanks to these donors for their vision to build a stronger industry through education.

Also in 2016, the Minerals Education Coalition (MEC) continued outreach at National Science Teachers Association conferences, National Engineering and Technology fairs and other industry events. MEC also launched its new website last fall with a new look and improved functionality to better deliver online minerals and mining education.

The Professional Engineering (PE) licensure program continues to maintain and offer the Professional Engineer examination for Mining and Mineral Engineers. As of January 6, 2017 three examinations have been partially or completely assembled (2017, 2018, and 2019). The October 2017 examination is assembled and will be pre-tested by SME PE Exam Committee members at the February 2017 Denver PE Workshop. The October 2018 exam is 95 percent assembled and will receive final QC/QA at the Annual SME PE Workshop at NCEES Clemson SC headquarters June 23-24, 2017. The October 2019 exam is 25 percent assembled in draft. Other major PAKS 2016 activity was the convening of volunteer SME members having the PE credential to take the actual October 2016 exam given to examinees. The assembly is called the Cut Score Panel in which the objective is to set a percent passing score for the current exam and statistical metrics for the next six years. The Cut Score Panel was accomplished Dec. 3-4, 2016 in Denver.

The ABET program providers conducted 12 visits to the mining and natural resources universities

FUNDING SOLUTIONS to mining's challenges



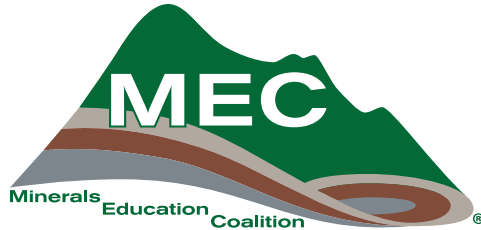
worldwide and continued to ensure education of the highest standards in 2016.

Miners Give Back, partnering with Engineers Without Boarders, gave out one \$5,000 grant in 2016. Temple Student Chapter will assist a small agricultural village of Saccha in northern Peru to gain access to clean water.

Additionally, SMEF looks forward, once again, to awarding numerous scholarships to deserving SME students at the 2017 SME Annual Conference & Expo. Currently the Foundation offers, with the faithful support of our funders, the following scholarships:

- MMSA/SMEF Past Presidential Scholarship which focuses on any aspect of the extractive minerals industry.
- Syd S. and Felicia F. Peng Ground Control in Mining Scholarship which encourages the development of ground control engineers.
- Ernest K. Lehmann Memorial Scholarship

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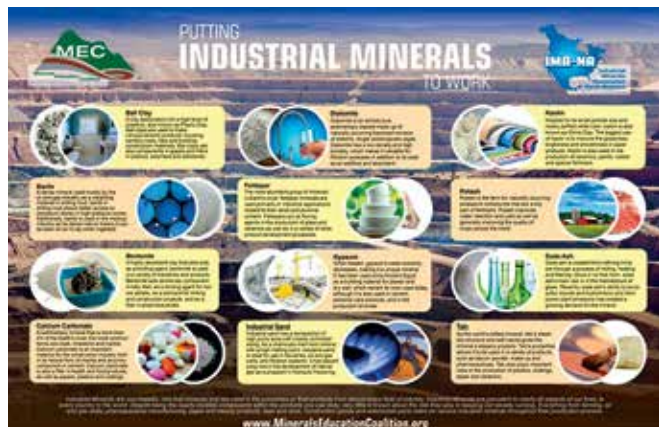


The Minerals Education Coalition's mission is to identify, produce and disseminate fact-based K-12 minerals education lessons and activities and to inform and educate the general public about the importance of mining in their everyday lives.

Led by Chair Bob Kilborn and Vice-chair Julie Marinucci, the 2016 MEC Committee provided the MEC with leadership and guidance in its operations, as well as its strategic direction going forward. MEC also recognizes individuals and organizations making meaningful efforts in education about minerals and mining, both within SME and as external partners. In 2016, MEC reached 414,173 users viewing 1,151,691 pages of www.MineralsEducationCoalition.org.

Website redesign

The new MEC website launched Sep. 15, 2016. With clear graphics, well-organized content and easy to use resources, MEC has provided a place for teachers and students alike to go for research and information. Users have free access to a mineral database, demonstrations, interviews, videos, lessons and experiments. The store still provides content-rich and scientifically accurate resources for teachers. Infographics and interactive pages help users



spend time learning about the story of mining, the history of mining and money in the United States and there is a "question of the week" for teacher use. The website is designed to be a dynamic and changing resource.

New Industrial Minerals Poster produced in collaboration with the Industrial Minerals Society

With the addition of MEC's new Putting Industrial Minerals to Work poster, MEC now offers four posters created to guide students and others through four SME commodity sectors--industrial minerals, coal, aggregates and iron.

2016 National Science Teachers Association (NSTA) Area Conferences: 1,900 educators served

Each year, the Minerals Education Coalition (MEC) participates in three NSTA Area Conferences to provide K-12 educators educational resources. Through the support of SME members, mining companies and other geoscience organizations, MEC reached 1,900 educators in 48 states, Washington, D.C., and Canada at this year's conferences. Thank you to outstanding leadership from SME members, including:

Earth Science Week Collaboration with the American Geosciences Institute (AGI)

MEC provided materials for the American Geosciences Institute's Earth Science Week (ESW), October 9-15, 2016. Following AGI's theme, Our Shared GeoHeritage, MEC's new "Mining and Money Catcher" activity sheets were included in 16,000 educator packets distributed internationally. The "Catcher" tells the story of money, gold rushes, legislation and mints across the United States. MEC contributed to a calendar page, also in the educator packet, which highlights a hands-on lesson on teaching density and how it relates to mineral processing. A new page was created on the new MEC website for Earth Science Week information as well, with an interactive infographic about mining and money.

MEC supports local outreach efforts of SME members, sections and student chapters

MEC has created a series of resources to support local outreach efforts of SME members, sections and student chapters, increasing two-way communication about local outreach challenges, successes and outreach resources available through MEC.

MEC also connects with active local volunteers and

sections during NSTA Regional Conferences in local areas.

MEC audience grows through social media

- Facebook: 1,349 page likes
- Twitter: 370 followers
- YouTube: MineralsInYourLife channel: 191 subscribers

MEC is researching the feasibility of a new MEC Pinterest Page for 2017 and pursuing additional videos for placement on MEC pages.

BSA's Mining in Society merit badge:

Mining In Society merit badges earned in 2016: 4,613

In popularity, The Mining in Society merit badge is one of the top five fastest growing in 2016, with an increase of 31.1 percent.

Move Mining

The MEC has collaborated with SME to produce the Move Mining competition to change the public perception of the mining industry. The campaign received forty concept papers, garnering support from twenty-five states, seven countries and twenty-eight Sections/Chapters.

The emphasis on “Telling Our Industry’s Story” through technology and innovation was a reoccurrent theme. The competition heard from the young and the young at heart, with three-fourths of our teams represented by the 35 years and younger demographic.

Five finalists were invited to pitch their concept, live, at The Move Mining Competition scheduled during the SME Annual Conference and Expo at the Colorado Convention Center, Room 103, Tuesday, Feb. 21, 2017.



The SME Professional Engineers Exam Committee prepares problems for the Mining and Mineral Processing (M/MP) engineering examination for licensure as a Professional Engineer. The exam consists of 80 multiple-choice questions and is offered once each year in October. The committee sends problems and solutions to the National Council of Examiners for Engineering and Surveying (NCEES), which formats the exam and transmits it to the individual jurisdictions for administration. The next M/MP PE Exam will take place Oct. 28, 2017. For years 2012 through 2016, total examinee count equaled 72, 81, 95, 71 and 62 respectively. Graphically representing 20 years of history 1997 to 2016 follows:

The percent passing the PE exam for first time examinees for the years 2012 to 2016 are 75 percent, 71 percent, 89 percent, 75 percent and 65 percent respectively.

The 2016 first time pass rate of 65 percent compares to the 20-year average of 68 percent.

As of Jan. 6, 2017 three examinations have been partially or completely assembled (2017, 2018, and 2019). The October 2017 examination is assembled and will be pre-tested by SME PE Exam Committee members at the February 2017 Denver PE Workshop. The October 2018 exam is 95 percent assembled and will receive final QC/QA at the Annual SME PE Workshop at NCEES Clemson, SC headquarters June 23-24, 2017. The October 2019 exam is 25 percent assembled in draft.

The 2016 exam was the first exam under the new specification completed in 2015 as part of the periodic PAK study and cut-score analysis, the method of overall exam calibration that occurs every seven years. The M/MP specification and exams are performing well evidenced by all metrics.

As part of the PAKS process, a new study guide *Study Guide for the Professional Licensure of Mining and Mineral Processing Engineers, Eighth Edition* was developed in 2015 by 8 PE Committee members and was published on schedule January 2016.

Other major PAKS 2016 activity was the convening of volunteer SME members having the PE credential to take the actual October 2016 exam given to examinees. The assembly is called the Cut Score Panel in which the objective is to set percent passing score for the current exam and statistical metrics for the next six years. The Cut Score Panel was accomplished Dec. 3-4, 2016 in Denver. Volunteers came from across the United States working the weekend. Three PE's from State Boards of Registration and

three members of the SME PE committee attended fulfilling the role of official Judges.

The PE exam review course for 2016 exam was held in Denver in September under Dr. Raja Ramani's direction. 32 engineers completed the review course.

Feedback from the participants continues to be excellent. Revenue generated by tuition more than covered the cost of conducting the review course. The next review course is scheduled for September 2017 in St. Louis, MO.

The five-year effort to write Edition II of the *Mining Reference Handbook* was in the second year of work. This effort is required by the states to represent the single reference that can be brought into the PE exam once the exam is converted from pad and pencil to computer-based. Heather Dougherty, PE, and Dr. Andrew P. Schissler, PE, are co-editors. 2016 activities included the updating of existing chapters and the writing of one new chapter on "Mining Methods." The overall goal is to have the first functional computerized exam by October 2021.

The SME PE Exam Committee continued participation in monthly meetings of the Licensing That Works committee. This committee, composed of engineering societies, opposes an initiative by various concerns to increase the educational credential for becoming a professional engineer from a bachelor's degree to master's degree or equivalent education (MOE). The LTW had continued success in 2016 to keep the MOE initiative at bay. Partial evidence exists that New Jersey may consider MOE in 2017.

As of Dec. 31, 2016, 629 problems are in the bank for use on future exams, up from 341 in 2009.

A special face-to-face meeting at Clemson, S.C. of SME PE Exam Committee occurred June 17-18, 2016 with 14 SME PE's attending. Problems were written and reviewed. A best-practice was implemented this year following the civil engineers of performing a final QC/QA on future exams. NCEES reimburses travel for attendees.

On Feb. 18-19, 2017, the SME PE Exam Committee held its regular meeting and workshop in conjunction with the SME Annual Meeting. The 2017 exam will be pre-tested and problems written and reviewed for future exams.

Heather Dougherty is the outgoing chair for 2016, Randy Reed, PE, is the chair for 2017 and Liane George PE is the Chair-elect for 2018. The SME Committee stands at 50 excellent hard-working members.



Professional Engineers Exam Committee

**Heather Dougherty, PE,
2016 Chair**

Executive Director's report

(Continued from page 3)

posed rules. SME submitted the organization's response early in the process and as a result many other comments referred to SME's thoughts. A 70+ page response that will help determine any future rulemaking from the SEC for the mining industry.

Summer of Savings

Finally, I want to mention that SME held a "Summer of Savings" program in July 2016. That program was "homegrown" by SME staff that provided members the opportunity for unique

savings on many SME services or products. This was a good year to try this savings program and one that engaged much of the staff to work together to serve the mission. SME is blessed to have a tremendous staff that cares about the members and the value that is derived from the Society.

After more than 12 years as your Executive Director, 2016 was no easier than the first year. But, I won't want it any other way. Each year is a learning opportunity as we make decisions for the Society and I suspect 2017 will bring even more learning.





At the Fall ABET Board of Directors meeting all of the new governance bodies of ABET, Inc., met in Baltimore, MD. SME was represented by Gary Skaggs, P.E., SME's ABET Board of Delegates Member and SME's Engineering Accreditation Commission (EAC) Area Delegation Member and C. Dale Elifrits, Ph.D., RM-SME, SME's E-TAC Area Delegation Member and alternate for Gary Skaggs. The day before the Board and Delegations meetings, Mona Vandervoort, SME Education Coordinator and SME Society Liaison to ABET, along with Dale Elifrits, attended the Annual ABET Society Liaison meeting.

This was the first meeting for each of the Area Delegations. The four Area Delegations, one for each commission, were created to provide a review and approval body to work uniquely with each commission and improve effectiveness of each in-

dividual commission's work. The new and smaller ABET Board of Directors (13 members in total) is the "court of review" for appeals of accreditation actions by all commissions. Area delegations members who are program evaluators, and many are past commission members as well, are now available to work as program evaluators absent the conflict of interest as when many of them were on the old, larger board of directors. The area delegate group first meetings went quite well for their first convening.

SME Visitor Selection Committee was asked to provide program evaluators for 18 ABET Accreditation visits during the Fall of 2016. SME was scheduled to attend an accreditation visit at Istanbul Technical University. ABET's EAC Executive approved a 1-year extension to the visit due to the current security situation.



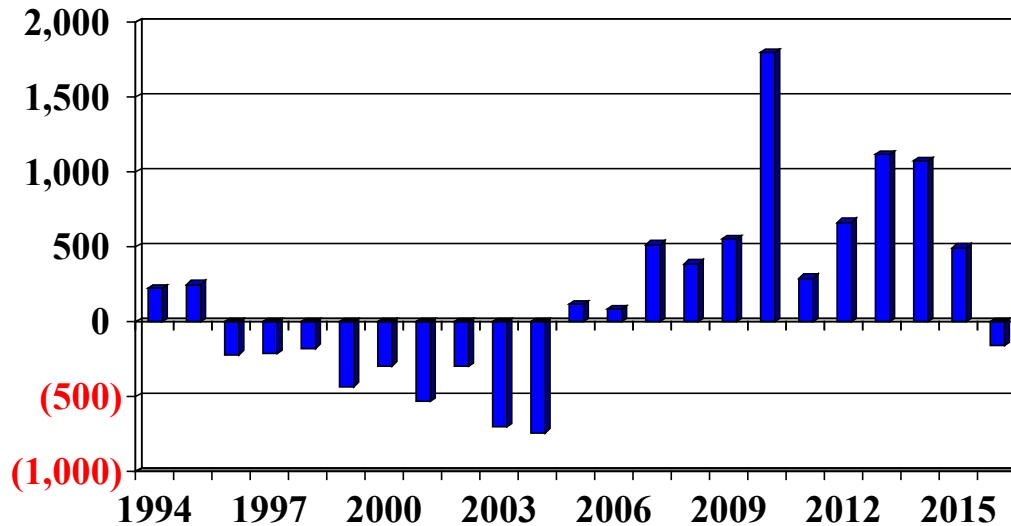
Fiscal 2016 was another difficult year for the industry and SME also had its first operating deficit in eleven years. During those eleven years SME's financial strength has grown substantially and we are well positioned, coupled with sensible cost controls, to weather the current

industry weakness.

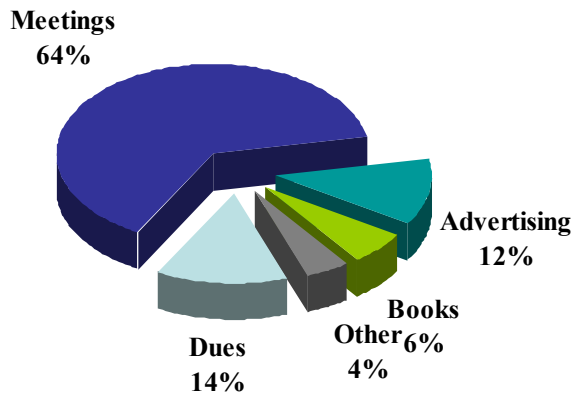
A very positive investment return resulted in an overall surplus of about \$790,000 for SME operations. For all entities the overall surplus exceeded \$2.4 million with net assets exceeding \$29 million.

Operating Surplus (Deficit)

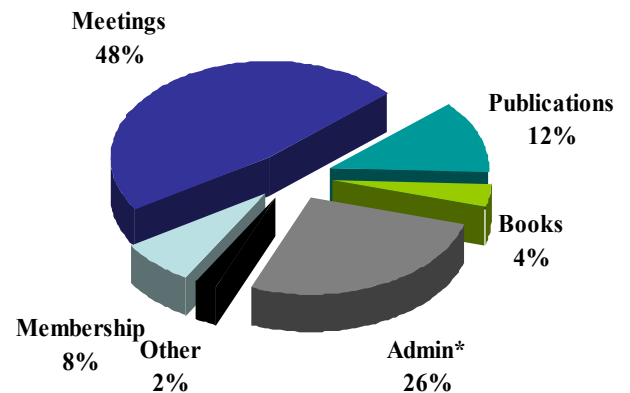
Thousands



Operating Revenue (Sources)



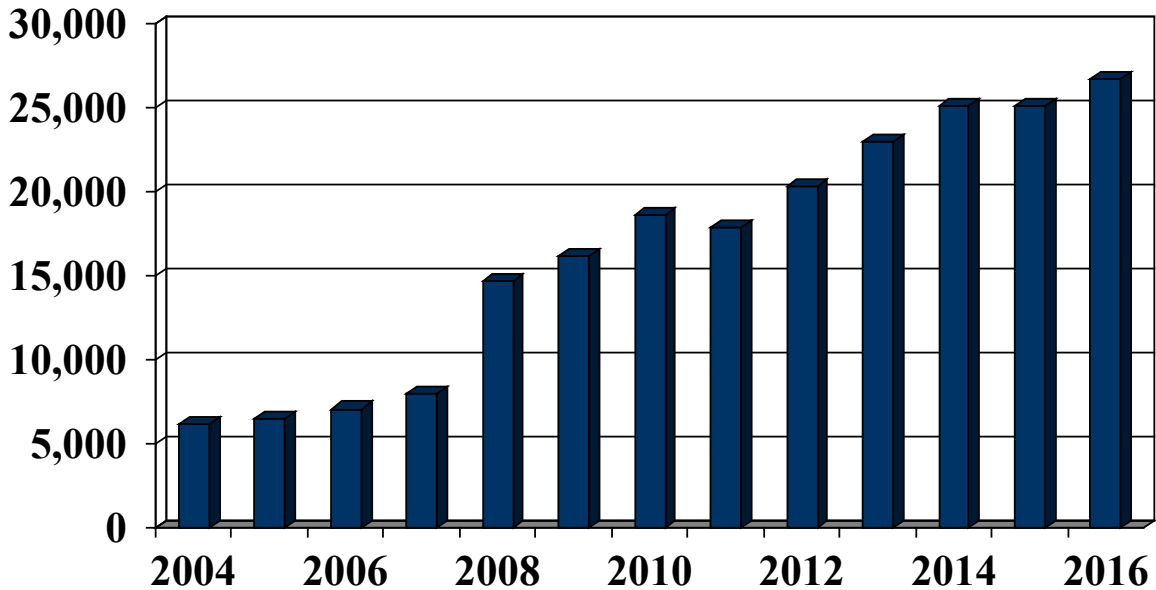
Operating Expenses



* Administration includes: Administration, accounting, customer service, IT, government affairs and web activities.

Cash and Investments

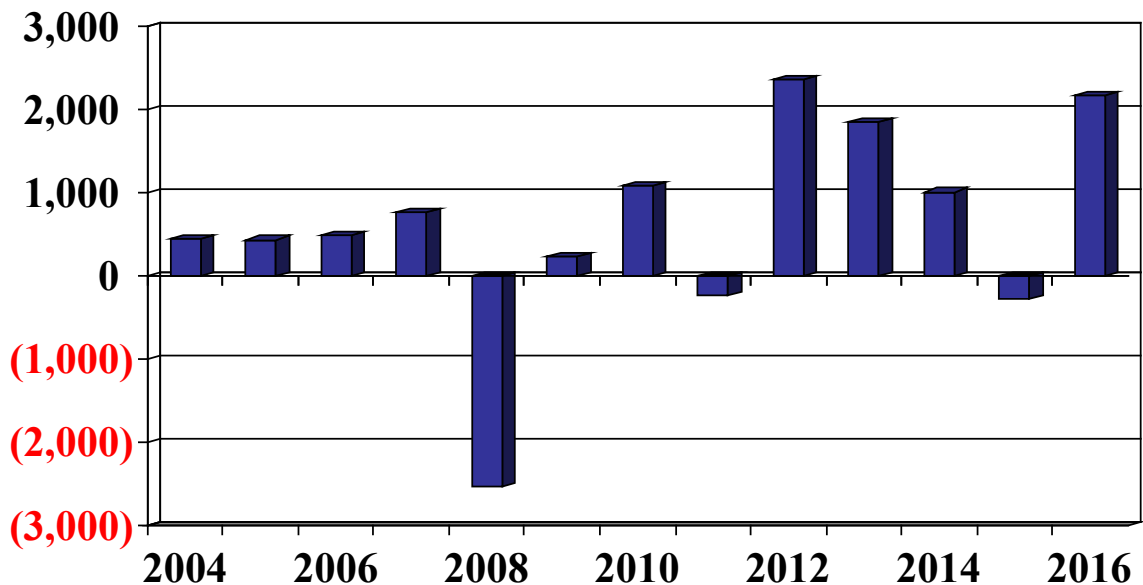
Thousands



WAAIME merger with SME in 2008 included \$8.2 million in new investment dollars. Approximately \$16.8 million of investments are restricted for specific activities of the SME Foundation, SME division activities and WAAIME scholarships.

Investment Income (Loss)

Thousands



AIME Awards

AIME Honorary Member	Hugh B. Miller
AIME Honorary Member	Arthur A. Schweizer
AIME Presidential Citation	Ponisseril Somasundaran
AIME Presidential Citation	Deborah J. Shields
Frank F. Aplan Award	S.A. Ravishankar
Mineral Economics Award	Ronald L. Lewis
Mineral Industry Education Award	Hugh B. Miller
James Douglas Gold Medal	William F. Riggs
Herbert Hoover Award	Leonard Harris
Charles F. Rand Memorial Gold Medal	Harry M. (Red) Conger IV
Rossiter W. Raymond Award	Aaron Noble
Howard W. Eavenson Award	John C. Stankus

SME Awards

Robert M. Dreyer Award	Ronald L. Parratt
WAAIME Founder's Award	Jean Davin
SME Distinguished Member	Courtney A. Young
SME Distinguished Member	D. Erik Spiller
SME Distinguished Member	C. Dale Elefrits
Outstanding Student Chapter	Indian School of Mines
President's Citation	Harry M. Parker
President's Citation	Mark N. Savit
President's Citation for Local Section Service	Neil and Camille Pren
Ivan B. Rahn Education Award	K. Marc LeVier
Ivan B. Rahn Education Award	Raja V. Ramani
Robert H. Richards Award	Robert Dunne
Past President's Plaque	Timothy Arnold

SME Foundation Awards

MEC Leadership Award	Corrie Ekholm
MEC Organization Recognition Award	SME Colorado Section
MEC Partnership Appreciation Award	Amautas Mineros Association
MEC Student Chapter Award	Norwood Student Chapter at the University of Kentucky
Syd S. Peng Ground Control in Mining Award	Gregory J. Hasenfus

SME Division Award Recipients

Coal & Energy Division Awards

Coal & Energy Division Distinguished Service Award	Thomas A. Gray
Erskine Ramsay Medal	Vladislav Keckojevic
Stefanko Best Paper Award	William G. Kendall, James D. Knoll, John A. Organiscak & David Yantek
J.W. Woomer Young Engineer Award	Nikhil Gupta
Coal & Energy Division Past Chair Award	Robert Kudlawiec

Environmental Division Awards

Environmental Division Distinguished Service Award	Liane T.S. George
Environmental Stewardship	Timothy M. Dyhr
Environmental Stewardship	Marcus A. Wiley
Environmental Division Past Chair Award	Patrick Gorman

Health and Safety Division Awards

Research and Educational Excellence	Susan M. Moore
Research and Educational Excellence	Emily A. Sarver
Operational Excellence	Running Right Leadership Academy
Health and Safety Division Past Chair	Thomas Hethmon

Industrial Minerals & Aggregates Division Awards

Industrial Minerals & Aggregates Distinguished Service Award	Gary P. Tomaino
Industrial Minerals & Aggregates Division Young Scientist Award	Ebrahim Karimi-Tarshizi
Robert W. Piekarz Award (Industrial Minerals)	K. Joe Garska
Robert W. Piekarz Award (Industrial Minerals)	Steven J. Stokowski
Industrial Minerals & Aggregates Division Past Chair	Jerry Gaunt

Mineral & Metallurgical Processing Division Awards

Antoine M. Gaudin Award	Gerald H. Luttrell
MPD Outstanding Young Engineer	Robert N. (Nick) Gow
Arthur F. Taggart Award	Jan D. Diller & Chen-Luh Lin
Milton E. Wadsworth Award	Fiona M. Doyle
Mineral & Metallurgical Processing Past Chair	Mark Jorgensen

Mining & Exploration Division Awards

Ben F. Dickerson Award	Donald R. Taylor
Mining & Exploration Division Distinguished Service Award	Thomas W. Camm
Daniel C. Jackling Award	Robert W. Schafer
Mining & Exploration Division Outstanding Young Professional Award	Melissa L.H. Martinie
Robert M. Peele Memorial Award	Matthew V. Deutsch
Miner of the Year	A. Clayr Alexander
Rock Mechanics	Loren J. Lorig
M&E Division Program Area Managers	Thomas Camm, Bradley Dunn, Vivien Hui, Gregory Sutton
William L. Saunders Gold Medal	Phillips S. Baker
M&E Division Past Chair	James Humphrey

Coal & Energy Division Scholarships

Aayush Anand
Indian School of Mines

Chelsea Barrett
Virginia Tech

Joseph Bright
Virginia Tech

Benjamin Butcher
SIU Carbondale

Nathan Ellgen
University of Utah

Donald Francescon
SIU Carbondale

Andrew Hanneke
Missouri S&T

Adrian Heieis
UBC

Carolyn Kosloski
Virginia Tech

Gireesh Subramaniam Sankara Raman
Penn State

Levi Rawlings
Colorado School of Mines

Mark Schuchardt
West Virginia University

Pritam Sinha
Indian School of Mines

Jenna Spencer
Virginia Tech

Daniel VanOverbeke
South Dakota S&T

John Sidney Marshall Memorial Scholarships (AIME/C&E Division)

Shiv Agarwal
Indian School of Mines

Batjargal Altangerel
SIU Carbondale

Shubham Choudhary
Indian School of Mines

Austin Davis
Montana Tech

Austin Diericx
SIU Carbondale

Spencer Evans
University of Utah

Kristina Miles
South Dakota S&T

Abigail Pfaff
Missouri S&T

Vaibhav Singh
Indian School of Mines

Logan Ward
Montana Tech

Environmental Division Scholarships

Lucas Rojas Mendoza
Virginia Tech

Gail Heath
University of Arizona

Sidharth Agrawal
Penn State

Chase Charron
Virginia Tech

Veolia Water Solutions and Technologies Scholarship

Travis Borrillo-Hutter
Colorado School of Mines

Industrial Minerals & Aggregates Division Scholarship

Gerald V. Henderson Memorial

Lauren Shields
University of Kentucky

Mineral & Metallurgical Processing Division Scholarships

Alexandra Anderson
Colorado School of Mines

Jim Mackay
UBC

Viviana Ramirez C.
Virginia Tech

Vaibhav Srivastava
University of Alaska Fairbanks

Richard Klimpel Memorial

Stephen Broddy
Montana Tech

Mining & Exploration Division Scholarships

Eugene Pfeleider Memorial

Katherine Burke
Missouri S&T

Steven C. Potter
Halley Keevil
Colorado School of Mines

Henry DeWitt Smith (AIME/M&E Division)

Chelsea Pomeroy
Colorado School of Mines

Jay Schafler
Missouri S&T

Laura Steeves
University of Kentucky

Joe Waite
Colorado School of Mines

Stewart R. Wallace Memorial Scholarship**Micah Claypool**
*University of Nevada Reno***2016 SME Foundation Scholarship Recipients****J.H. Fletcher & Co. Scholarship****Elizabeth Radcliffe**
*University of Utah***Brooklynn Younts**
*University of Kentucky***McIntosh Engineering Scholarship****Kevin Moran**
*Colorado School of Mines***Robert Murray**
*UBC***Laura Steeves**
*University of Kentucky***MMSA/SMEF Presidential Scholarship****Elizabeth Radcliffe**
*University of Utah***Syd S. and Felicia F. Peng Ground Control in Mining Scholarship****Anna Perry**
*Queens University***Rahul Thareia**
*University of Nevada Reno***Ernest K. Lehmann Memorial Scholarship****Caroline Dziak**
*Missouri S&T***Brian Minkin**
*University of Nevada Reno**WAAIME Division Scholarships are listed on page 23***SME Foundation***(Continued from page 25)*

which specifically targets students studying geology or geological sciences.

- McIntosh Engineering Scholarship which supports underground mining students.
- J.H. Fletcher & Co. Scholarship which seeks students who apply technology to improve safety and productivity in underground mining.

A new stewardship program was started last year for large individual donors to the SME Foundation. All donors who give \$1,000 or more in the calendar year now qualify for VIP Access at the SME Annual Conference & Expo. Last year there were 32 donors who received this experience; in 2017 there will be in excess of 50 donors qualifying for this prestigious distinction. Please call the SME Foundation for more information about this exciting new recognition.

Lifetime Giving Recognitions that will be presented at the 2017 Annual Conference include:

- Kelvin Buchanan – John T. Boyd Challenge
- C. Dale and Kathy Elifrits – John T. Boyd Challenge

- Ramani Gautam – John T. Boyd Challenge
- Bechtel Mining – John T. Boyd Challenge
- Kinross Gold – John T. Boyd Challenge
- James Boyd – \$25K Club
- David and Patrice Kanagy – \$25K Club
- Sukumar Bandopadhyay – Ruby Circle
- R. Gene Dewey – Ruby Circle
- Raja Ramani – Ruby Circle
- William W. Reid – Ruby Circle
- Royal Gold Inc. – Ruby Circle
- Richard Whiting – Emerald Circle

As outgoing President of the SME Foundation, and on behalf of the entire SMEF Board of Trustees and SME staff, I thank you for your support to the programs which SMEF promotes. I ask for your continued financial support of one or more Foundation programs in the year ahead to help strengthen and enhance our industry for the next generation. It has been a privilege to serve as the SME Foundation President.

Thank you,
Dennis Bryan

2015-2017 SME Foundation President





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