

2013 SME ANNUAL REPORT

Contents

- 2 Report from the SME President
- 3 Report from the SME Executive Director
- 4 SME Board of Directors
- 5 Strategic Committees
- 6 Government & Public Affairs
- 7 Membership
- 9 Local Sections
- 10 Legion of Honor Members
- 11 Student Chapters
- 12 25-Year Members
- 13 Meetings
- 15 Publications
- 17 SME Books
- 18 Webinars/Social Media
- 19 Coal & Energy Division
- 19 Environmental Division

- 20 Industrial Minerals & Aggregates Division
- 21 Mineral & Metallurgical Processing Division
- 21 Mining & Exploration Division
- 22 Underground Construction Association of SME Division
- 23 WAAIME Division
- 24 Report from the SME Foundation President
- 24 SME Foundation
- 26 Minerals Education Coalition
- 28 Professional Engineers Exam
- 30 ABET
- 31 Financials
- 35 SME/AIME Awards
- 35 SME Scholarships



SME Strategic Goals





To be THE resource and advocate for the mining community



We believe in:

- **Members first**
- **Ethical behavior**
- Partnering and networking
- **Professional excellence**
- **Customer satisfaction**
- **Knowledge sharing**
- Innovation
- Educational support
- **Inclusiveness**
- Accountability



SME will be recognized internationally as the leading professional mining organization.

Goal A

SME will be its members' indispensable resource for professional services.

Goal B

SME will be the primary resource of mining and underground construction information for all stakeholders.

Goal C

SME will maintain a financially secure and stable organization in order to execute its strategic plan.

Goal D

SME will establish strategic partnerships/ relationships, alliances and coalitions.

Goal E

SME will review and reshape its infrastructure to better align with and support its strategic plan.



Report from the **SME President**



Jessica Elzea Kogel 2013 SME President

o13 has been a year of expansion and outreach for SME. The Society has enjoyed internal as well as external growth focused on building a stronger community and a broader footprint that extends beyond our traditional boarders. The guiding principal behind this growth is to ensure SME's relevancy and value to members, as well as the larger community. Growth milestones for 2013 are numerous. They include membership passing the 15,000 mark, the addition of six new student chapters (see page 11) and the revitalization of the Wisconsin Chapter, to name a few of the highlights.

In addition, we have reorganized and added staff to better support SME's long-term development strategy. Recognizing the importance of a robust operational platform for the Society, the board of directors approved a new association management system to replace our current outmoded system. The new system will improve the member experience while increasing staff efficiency and enhancing the delivery of our products and services. The board also approved a new website that will directly impact, not only the member interface with the organization, but also the public face of the SME brand.

2013 also marked a significant financial milestone for SME. The Society enjoyed the largest operating surplus in the organization's history.

Outreach efforts in 2013 led to positive progress toward our goal of positioning SME as "THE resource and advocate for the mining community."

We continued to build our presence in Washington, D.C. through a variety of avenues including quarterly visits to Capital Hill staff, the publication of three new technical briefings and the establishment of an SME Congressional Fellowship. In April, SME leadership traveled to Washington to meet with environmental, nongovernmental organizations to start a dialogue about common social, environmental and economic issues centered around mining. This collaborative partnership with the environmental community will be showcased at the keynote session at the annual meeting, entitled "Leadership in Uncertain Times."

SME's profile as an organization that holds an influential seat at the public policy table was cemented when U.S. Congressman Doug Lamborn (R-CO) held a briefing at SME headquarters in August. Representative Lamborn represents Colorado's 5th Congressional District and is chairman of the House Subcommittee on Energy and Mineral Resources. The subcommittee oversees energy production and mining on federal lands.

In keeping with our goal to maintain a global presence, the Task Force on Sustainable Mining continued its efforts within the World Federation of Engineering Organizations, which included laying the groundwork

to become a standing committee. Standing committee status will ensure that the mining engineering voice is heard at the highest level of international influence, including the United Nations, where global policy is set. During 2013, members of the task force participated in the 6th International Conference on Sustainable Development in the Minerals Industry in Milos, Greece. It also participated in the WFEO general assembly conference in Singapore.

SME continues to grow its international presence and 2013 saw significant results in this area. A memorandum of understanding was signed with several sister organizations, including AUSIMM, CIM, SAIMM and SME, to create the Global Mineral Professionals Alliance (GMPA). GMPA will facilitate professional development for industry professionals across the globe. In addition to this, SME has developed a targeted international membership growth strategy that builds on the existing growth that has taken place during the last decade or so under the leadership of SME's International Committee. Many SME members have volunteered their time and energy to this important endeavor.

None of the growth and outreach that I have mentioned is relevant if we cannot sustain mining engineering and geology education. Institutions of higher learning are the pipeline that provides the industry's workforce, and the health of this pipeline appears to be at risk. For example, since 1982, the number of mining engineering departments in the United States has dropped from 25 to 14, almost 33 percent of faculty will retire during the next five years, and the need for well-trained technical professionals will only grow as world population increases.

In order to tackle this issue, the SME board has established an Education Sustainability Task Force. SME's 2014 president, John Marsden, had the foresight and initiative to bring this issue before the board. He identified a critical need and proposed a solution that will result in an actionable path forward. John's leadership and impact on the Society has been superlative, and I am pleased to turn the reins over to him at the end of my presidency.

During my year as president, I personally tried to reach out to as many members as possible. I had the good fortune of meeting members across the globe, and each encounter meant a great deal to me. I had the opportunity to connect with members through my blogs and monthly president's columns. It has been a pleasure to serve SME and to get to know so many members. Thank you for your support, energy and dedication to SME and the mining industry. Thanks to SME's talented staff who make it all happen. They are the engine that drives the organization and ultimately ensures its success.

Report from the SME Executive Director



arely is anything a one-year activity at SME. It takes proper planning, thorough research, data collection, proper analysis and a solid implementation plan to develop a successful program. In 2013, SME continued many successes and plowed new ground to ensure that members received value from the Society.

So, with 2013 in the books, here are a few outcomes that have much more detail in the following pages:

Boy Scouts — If you did not hear, SME finally received approval from the Boy Scouts of America for a Mining in Society merit badge. SME has had two groups of people working diligently this year to finalize the merit badge and have it launched at the Annual Meeting in Salt Lake City, UT. That is a culmination of eight years of effort.

Membership — SME realized membership growth in numerous ways this year. Total membership reached 15,260, which was a 3.9-percent increase from 2012. Student membership grew to 1,752, an increase of 11 percent from 2012. In addition, SME now has 35 student chapters, an increase of five during the year.

Meetings — SME held several new meetings in 2013, including the symposium Environmental Considerations, in Charleston, WV, the Current Trends in Mining Finance Symposium in New York City, and the Geostatistics and Resource Estimation short course in conjunction with the Arizona Conference. Along with these programs, the SME Annual Meeting, held in Denver, CO, topped the 7,200 mark in attendance, with more than 820 exhibitors. This program was held jointly with the Colorado Mining Association, which has become a great partner with SME when our Annual Meeting is held in Denver, CO.

Cooperation — Speaking of other organizations, SME has truly reached out to a host of organizations during the past 12 months and held meetings with CIM, AusIMM, SAIMM, IIMP, AIMMGM, NMA, IMA-NA. Goal D of the SME Strategic Plan states that: "SME will establish strategic partnerships/relationships, alliances and coalitions." During 2013, SME has instituted programs with CIM and AusIMM including a critical minerals conference, a global mining standards project and

the sharing of relevant data that will assist all of these organizations in driving member value.

Publications — Did you see eNews or *Mining Engineering* online this year? Both products have become important venues for reporting and informing the SME members of the latest news and changes in the industry. The readership continues to improve, and the number of online articles and news stories has increased.

Government Affairs — SME continues to demonstrate its mining industry knowledge to members of Congress. During the year, SME established a congressional fellowship that will place its first fellow in a congressional office or on a congressional committee in 2014. Look out Washington, some real mining knowledge is coming.

Foundation — The SME Foundation continued to raise funds to support the profession as well as the industry. Annual giving topped more than \$1.6 million during the year, with support for some basic SME programs such as MEC, PE and ABET. New programs are also being developed to assist with educational sustainability, scholarships and other professional areas.

Financial Stability — During 2013, SME finished with the strongest balance sheet in its history. The Society topped \$29 million in total assets, with net assets growing \$3.7 million. Overall, the income of all SME entities totaled more than \$12.2 million, with operating expenses of \$10.7 million for a \$1.5-million operating surplus.

Next year will be another year of continued growth and improvement in the Society. We will be working to provide the best products and services to our members and nonmembers alike, so that your investment in SME is well spent.

What makes SME great? The members. I have travelled more in 2013 than any other year that I have served as the SME executive director. In all of my travels, it is truly a pleasure to visit with members, hear of their work and support the efforts to improve SME sections, divisions, student chapters and other entities of the organization. There is a lot more to be done for the profession and the industry, and I look forward to another good year in 2014.



David L. Kanagy, CAE SME Executive Director

2013

SME Board of Directors



Jessica Elzea Kogel 2013 President Imerys Pigments & Additives Group



John O. Marsden

President-Elect

John O. Marsden

LLC



Past President Drew Meyer Consulting Inc.



Secretary and Treasurer SME



Joseph M. Driscoll Director AMEC



Jonathan G. Price Director Nevada State Geologist Emeritus



Marc A. Herpfer

Director

Oil Dri Corp.



Hugh B. Miller

Director

Colorado School of Mines



Steven C. Holmes

Director

KGHM International
Ltd.



Mary B. Korpi

Director

Newmont Mining
Corp.



J. Steven Gardner 2015 SME President ECSI LLC



John D. Wiebmer Incoming Director Caterpillar Global Mining



Ross R. Bhappu Incoming Director Resource Captial Funds

SME

Strategic Committees

Outreach Strategic

Steven Holmes

Chair, KGHM International Ltd.

Peter Dolph Golder Associates

Mary Korpi Newmont Mining Corp

Donald Dwyer Barrick Goldstrike

John English Vulcan Materials Co

Michael Rowe Resource Capital Funds

Eric Wang Jacobs Engineering Group Inc

Finance Strategic

James Komadina Chair, Retired

Hugh Miller Colorado School of Mines

Ross Bhappu Resource Capital Funds

J. Steven Gardner 2015 SME President ECSI LLC

Lok Home
The Robbins Co

Ryan Murray Murray Energy

Tim Swendseid RungePincockMinarco

Education and Professional Development

Jonathan Price

Chair, Nevada State Geologist Emeritus

Dan Alexander

Michael Nelson University of Utah

John Uhrie

Newmont Mining Corp

Kramer Luxbacher Virginia Tech

Manoj Mohanty Southern Illinois University

Abani Samal Rio Tinto Exploration

Nominating Strategic

Jessica Elzea Kogel SME President and Chair, Imerys Pigments & Additives Group

John Marsden

SME President-Elect, John O. Marsden LLC

Jonathan Price

Nevada State Geologist Emeritus

Michael Myers Baldor Electric Co

Joseph Driscoll AMEC

Mike Sheahan Front Range Aggregates

Amy Jacobsen
Behre Dolbear Management Consulting

Sam Shoemaker Member, Barr Engineering

Products and Services

Joseph Carnahan Chair, Luck Stone Co

Joseph Driscoll Board Liaison, AMEC

Murali Gadde Peabody Energy

Charles Beasley Perry Supply

Gary Buchan Norwest Corp

Thomas Gray Tetra Tech Inc

Jess Kindler
Atlas Copco CMT USA LLC

Structure and Governance

Marc Herpfer Chair, Oil Dri Corp

David Klug David R. Klug & Associates

Jamal Rostami

The Pennsylvania State University

Daniel Eyde St. Cloud Mining Co

Charles Kliche

South Dakota School of Mines and Technology

S.A. Ravishankar Cytec Industries

Genevieve Bodnar Doe Run Co.



Government and **Public Affairs**

ME's Government and Public Affairs Committee (GPAC) has continued to work diligently to raise the political profile of SME as a fact-based, nonpartisan, technical mining resource to regulatory agencies, members of Congress and their staffs 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 becoming a resource for, the staffs of the House Natural Resources Committee and Senate Energy and Natural Resource Committee, among others.

GPAC issued the following three technical briefing papers during 2013, bringing the total number published to 12:

- Federal Support for U.S. Mining Schools.
- Aggregates Contribution to U.S. Infrastructure Investment.
- Industrial Minerals' Impact on the U.S. Economy.

These papers have been distributed to congressional staff on the following House committees: House Transportation and Infrastructure; Science, Space and Technology; and Natural Resources; as well as to the Senate committees on Energy and Natural Resources; and the Environment and Public Works.

In March, GPAC staff participated in coordinated congressional visits in Washington, D.C. with the Society of Women Engineers and the Founding Engineering Societies.

In April, GPAC staff, SME's 2013 president and SME's executive director held meetings in Wash-

ington, D.C. with representatives from the World Wildlife Fund, Conservation International, the Wildlife Habitat Council, the National Academy of Sciences, the National Stone, Sand and Gravel Association (NSSGA) and various House members.

In August, SME hosted a congressional briefing at its headquarters in Englewood, CO by Rep. Doug Lamborn (R-CO), Chairman of the House Subcommittee on Energy and Mineral Resources. Lamborn addressed representatives of Denverbased mining companies and talked about the outlook in 2013-2014 for rare earths and critical and strategic minerals legislation in his subcommittee and the full House Natural Resources Committee. SME has worked with Lamborn's staff and the staff of Rep. Jeb Hensarling (R-TX), Chair of the House Financial Services Committee, to develop a letter to the U.S. Securities and Exchange Commission (SEC) directing the agency to act on SME's petition for rulemaking to amend Industry Guide 7. That contains the SEC's basic disclosure policy for mining companies, which was filed in October 2012.

In September, GPAC staff participated in congressional visits in Washington, D.C. with the American Geosciences Institute. Staff also held separate meetings with representatives of the World Bank, Africare, NSSGA, IMA and congressional staff of the House and Senate Natural Resource Committees.

In December, SME opened the application process for qualified candidates for the inaugural Congressional Fellowship for mining. SME's fellow will be located in an office of a member of Congress or a congressional committee in Washington, D.C. beginning in September 2014. The final candidate will be introduced to the SME Board of Directors at the 2014 Annual Meeting in Salt Lake City, UT.



ME has had consistent growth in membership in each of the past seven years – a positive trend that is expected to continue in 2014. In 2013, SME saw a 3.9 percentage growth in membership. As of Dec. 31, 2013, membership totaled 15,260.

The Society realized a significant increase coming from the Associate Under 30 category in 2013, with a 16-percent increase, more than all other membership categories. With the increase in Associate Under 30 category also comes an increase in the overall percentage of female members. Currently, in the Professional Member category, males make up 90 percent while females comprise 10 percent. In contrast, in the Associate Under 30 category, males comprise 80 percent while females comprise 20 percent, showing a positive growth trend for more female professionals in the industry.

SME student membership grew by 11 percent to 1,752, with 36 student chapters in the United States, Canada, Mexico, Peru, Chile, Colombia, The Netherlands and India.

SME's Environmental Division membership grew

by 12 percent, the highest percentage growth in membership among all eight SME divisions.

International membership grew by 3.5 percent in 2013, reaching 2,861 members from 96 countries.

SME exhibited at several events during 2013 in the United States, Canada, Mexico and Peru 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.

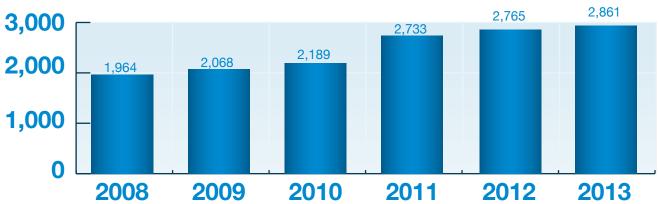
In 2013, SME recruited more than 600 new members at a host of conferences. The SME Annual Meeting and Exhibit in Denver, CO alone brought in 350 new members.

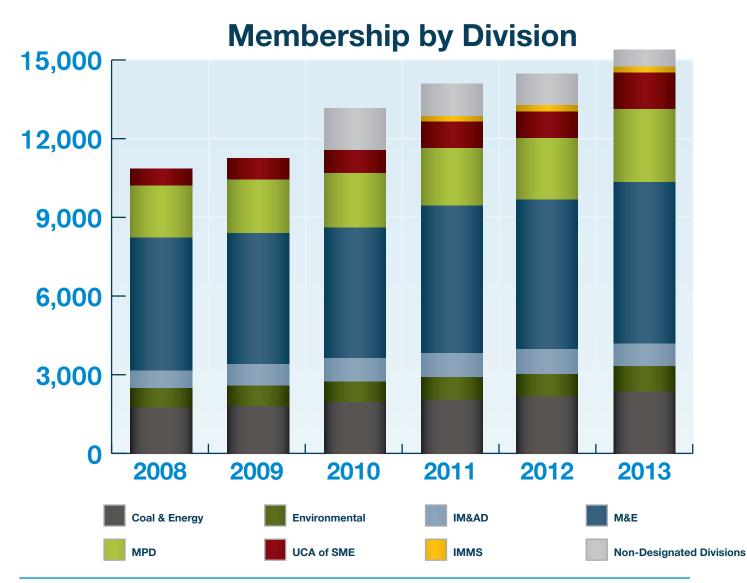
To increase recruitment of new members at conferences, SME reaches out to nonmember conference attendees before and after each conference to increase exposure during the event. Marketing methods include sending personalized emails, postcards, gift certificates and brochures containing a special offer for a free book for becoming a SME member at a particular conference.

Membership by Grade 18,000 15,260 14.686 15,000 14,086 13,149 12,309 12,050 12,000 9,000 6,000 3,000 2008 2010 2009 2011 2012 2013 **Professional Members Registered Members Student Members**

2013 **Membership**







Membership Local Sections



wo local sections were revitalized in 2013, the Wisconsin Section and the Boise Section. Under the leadership of new section chair Andrea Martin, the Wisconsin Section hosted a regional conference in September. The Wisconsin Section is working with two universities to help create SME Student Chapters. It is also planning a field trip for spring 2014 and a joint conference in the fall 2014 with the Minnesota Section's Twin Cities Subsection.

The Boise Section, under new Chair Dale Kerner, held its first meeting, a golf outing, in September 2013, followed by two technical meetings in October and December. The Boise Section has planned two technical meetings in February and April 2014, as well as officer elections in April.

Henry Krumb Lecture Series

The 2013 Program Committee selected, and the SME Board of Directors approved, four Henry Krumb Lecturers. To date, four local sections have requested a lecturer for one of their section meetings. The lecturers and their topics are:

- Julian Anderson, "The role of the project management professional during project startup."
- Tom Goodell, "Resolution Copper's underground exploration project Number 10 shaft development."
- Xuming Wang, "Separation of carnalite from halite by reverse flotation with dodecyl morpholine for the production of potash."
- J.D. Wientjes, "Haulage fleet definition tool."

Local Section Grants

In the fifth year of SME's Local Section Grant program, the Society awarded \$15,000 in grants to the following local sections:

Colorado Section — Awarded a \$2,500 grant to support the following projects:

 All About Mining course. The Colorado Section was awarded \$1,500 to sponsor scholarships for three local teachers to attend the All About Mining course through the Colorado Mining Association. The course educates K-12 teachers about mining, metallurgy and exploration and shows them that minerals and metals are essential in their daily lives. The course provides the

- teachers with information from industry experts, materials and an interest in minerals that they can use to teach their students.
- NSTA Conference –The 2013 National Science Teachers Association (NSTA) regional conference was held in Denver, CO. The Colorado Section's Minerals Education Coalition Committee hosted a booth at the NSTA Conference and will hand out mineral kits and DVDs that contain information about the minerals business in the form of presentations, classroom activities and educational games. The Colorado Section was awarded \$1,000 to assist with the costs incurred in creating the mineral kits and DVDs to be distributed at the conference.

Florida Section – Awarded a \$1,000 grant to support the section's efforts to develop a new display booth for use at local and regional conferences and trade shows.

Minnesota Section — Awarded a \$6,000 grant to support the following projects:

- Minnesota Minerals Education
 Workshop The Minnesota Section
 was awarded \$3,250 to assist in funding the Minnesota Minerals Education
 Workshop. The goal of the workshop is to raise awareness of the positive role that mineral resources play in Minnesota. The workshop consists of a day-long series of classroom sessions followed by field trips and tours of mining operations.
- Engineering, Cool! The Minnesota Section was awarded \$2,000 to assist with funding the Engineering, Cool! program. Engineering, Cool! is an afterschool program for sixth grade students in Hibbing, MN. The purpose is to teach science, technology, engineering and math in a hands-on way through real-life experiments. Engineering, Cool! is designed to be an introductory program to encourage students to pursue advanced math and science courses in high school. The engineers also have a chance to educate the students on the various career paths available in science- and engineering-based education.
- Educational materials The Minnesota Section was awarded \$750 to provide gold panning kits and other educational

Membership Local Sections

materials at the Minnesota Museum of Mining's annual picnic. The Northern Minnesota Subsection partners with the Minnesota Museum of Mining for an annual picnic for members.

South Texas Minerals Section — Awarded a \$3,500 grant to support the Texas Mining and Reclamation Association's teacher workshops. The purpose of these workshops is to improve the quality and effectiveness of earth-science education, as well as to promote an understanding of the balance between the need to develop our natural resources and a commitment to the environment.

Wisconsin Section — Awarded a \$2,000 grant to purchase rock kits that will be used to assist local Boy Scouts in completing the requirements to obtain the Mining in Society merit badge.

Local section financials

All U.S.-based local sections are required to report their financials to SME following the fiscal year end. For fiscal year 2013 (Oct. 1, 2012-Sept. 30, 2013), 37 of 47 U.S. sections had reported their financials as of Jan. 2, 2014. Attempts to contact the officers of the remaining 10 local sections regarding the financial statements are ongoing.

As of Jan. 2, 2014, SME has a number of sections that have failed to provide their annual financial statement for the past three years (or more). Two of these sections (Arkansas and Cochise) are considered delinquent and may have to be closed due to noncompliance with Internal Revenue Service regulations.

The Central Texas Mining, North Pacific, Trinity and Utah Coal local sections have been identified as inactive.

Legion of Honor Members

Richard Hodgson, The Woodlands, TX

Russell E. Bailey, Fort Collins, CO Raymond E. Bishop, Jasper, AL John N. Carlson, Lake Leelanau, MI Walter S. Case, Hobbs, NM William E. Conway, Chardon, OH Kim P. De Rubertis, Cashmere, WA Lyndon L. Dean, Waynesville, NC Merton F. Dibble, Morganton, GA Ray A. Eastman, Chino Hills, CA Mark E. Emerson, New York, NY Christopher Erskine, Parker, CO David C. Fitch, Reno, NV Robert A. Flake, Houston, TX Donald D. Haas, Highlands Ranch, CO Jack C. Hamm, Collbran, CO John K. Hammes, Hoboken, NJ Charles C. Hawley, Anchorage, AK

David A. Holmes, Denver, CO William A. Hustrulid, Veradale, WA Gary D. Johnson, Dallas, TX Robert B. Kistler, Grants Pass, OR Henry Klehn, Newhall, CA Harry P. Kleiman, Iron Mountain, MI Hans G. Kok, Port Charlotte, FL Ronald D. Luethe, Rengo, Chile Harold W. Lynde, Houston, TX Oliver T. Maki, Elliot Lake, ON Michael K. McCarter, Salt Lake City, UT Richard W. Morris, Veradale, WA Narendra M. Naiknimbalkar, Richland, WA William G. Osborne, Yuma, AZ James L. Post, Nevada City, CA Juan A. Proano, Washington Crossing, PA

Donald E. Ranta, Golden, CO Walter Riethmeier, San Rafael, CA George E. Ryberg, Prescott, AZ Wolfram T. Seiler, The Colony, TX William L. Shaffer, El Paso, TX David R. Shoemaker, Taos, NM Colin E. Smith, Victoria, BC, Canada Robert L. Strahan, Paso Robles, CA Donald L. Streib, Morgantown, WV Modesto V. Tamondong, Roseville, CA Tommy B. Thompson, Reno, NV Fun-Den Wang, San Diego, CA Scott H. Williams, Villa Rica, GA Royce E. Wyrick, Rio Rancho, NM David C. Yang, Morgantown, WV Godfrey Zakula, Kinney, MN

Membership Student Chapters



he 2013 SME Student Chapter Fall Membership Challenge was considered a success. Student chapters recruited 414 student members and renewed 375. Awards were given to the top three student chapters for their recruitment efforts. The South Dakota School of Mines & Technology Student Chapter was the winner. Second place went to the University of Arizona Student Chapter. Third place went to the SME Student Chapter of West Virginia University. The grand prize of \$400 went to Virginia Polytechnic Institute & State University.

A \$250 bonus was awarded to the student chapters that recruited more than 25 new members during the contest. The schools receiving the bonus were Virginia Polytechnic Institute & State University, the University of Kentucky, the South Dakota School of Mines & Technology, the University of Arizona, the University of Utah, West Virginia University and the Missouri University of Science & Technology.

Prior to the 2013 Annual Meeting in Denver, CO, the traditional Mentor Program was converted into an Online Mentor Program. The Online Mentor Program was very successful, with 103 mentor/mentee matches present during the Annual Meeting. SME staff was on site Sunday to assist members with registration for the online program. Staff registered a record low five members on site. Currently, 58 new mentor/mentee matches are registered for the 2014 Annual Meeting.

On Aug. 1, 2013 the SME Student Chapter International K-12 Outreach Challenge was introduced to the student members and faculty advisors. The objective of the SME Student Chapter International K-12 Outreach Challenge is to have student chapter teams visit local K-12 schools to give a one-period presentation to educate the students on the importance of mining and minerals in their everyday life. The timeline for the challenge is one academic year. The contest began on Aug. 1, 2013. The ending date for presentations is July 31, 2014. The team that reaches the greatest number of schoolchildren in their classrooms will receive a \$250 cash award, a certificate of recognition and a \$500 travel allowance to attend the SME Annual Meeting. An anonymous sponsor donated \$1,000 to increase the cash prize to \$250 for each of the five, first-place team members. Currently, there are 13 schools yielding 28 teams participating in the challenge.

Five new student chapters were added to SME during 2013. The chapters are Minnesota State University – Iron Range Engineers, National University of Apurimac (Peru) – Micaela Bastidas, University of Chile, University of Laval (Canada) and Pontifica Universidad of Chile.

Outstanding Student Contest Winners:

Winner: University of Kentucky, Student Chapter of SME

First Runner-up: Colorado School of Mines, Student Chapter of SME; Second Runner-up: University of Arizona, Student Chapter of SME; Third Runner-up: West Virginia University, Student Chapter of SME.

SME Student Chapters

Colorado School of Mines

Colorado School of Mines UCA of SME Chapter

Delft University of Technology

Indian Institute of Technology Kharagpur Student Chapter

Indian School of Mines

Kent State University

* Minnesota State University - Iron Range Engineers

Missouri University of Science & Technology

Montana Tech of the University of Montana

* National University of Apurimac (Peru)

National University of Colombia - Medellín School of Mines

New Mexico Institute of Mining & Technology

Pennsylvania State University

* Pontificia Universidad Catolica de Chile

Pontificia Universidad Catolica Del Peru

Queens University

South Dakota School of Mines & Technology

Southern Illinois University at Carbondale

* The Richard Stockton College of New Jersey

Universidad Autonoma de Chihuahua

* Universidad de Chile

University of Alaska Fairbanks

University of Arizona

University of British Columbia

University of Kentucky

* University of Laval (Canada)

University of Minnesota-Duluth

University of Minnesota-Twin Cities

Universidad Nacional de Moquegua

Universidad Nacional Mayor de San Marcos

University of Nevada-Reno

University of Pittsburgh

University of Utah

Virginia Polytechnic Institute & State University

West Virginia University

* Student Chapter added in 2013

SME

Membership 25-year members

Daniel B. Adams, Helena, MT Ely J. Ades, Las Vegas, NV Charles M. Anderson Jr., Paris, KY Hiroshi Asahi, Tokyo, Japan Brent C. Bailey, Lone Tree, CO Mark D. Bailey, Glenelg South, SA, Australia Louis Barletta Jr., Canonsburg, PA Mark D. Beerkircher, Calgary, AB, Canada Wolfram A. Bernhart, Loeben, Austria Vincent S. Bracken, Salt Lake City, UT Charles A. Braun, Idledale, CO Robert A. Brozdowski, Victoria, BC, Canada Charles H. Bucknam, Englewood, CO John H. Burrows, Reno, NV Juan J. Cabuto V., San Ysidro, CA Christopher Cooney, Philipsburg, MT Rodney A. Cooper, Richmond Hill, ON, Steven V. Dale, Belcher, KY William G. Davenport, Tucson, AZ Arden D. Davis, Rapid City, SD James G. Davis III, Clifton, AZ James G. Davison, Trail, BC, Canada John L. Dorsey, Tucson, AZ Joseph A. Dos Santos, Marietta, GA Jim Espinola, Prineville, OR Timothy W. Fadda, Reno, NV Robert H. Fanning, Draper, UT Frank K. Fenne, Highlands Ranch, CO Alan R. Ferguson, Brookwood, AL Cesar J. Ferron, Peterborough, ON, Canada Darrin H. Flinn, Roanoke, TX Joseph M. Foster, New York, NY Yves C. Gallet, Grand Junction, CO Leslie E. Gertsch, Rolla, MO Steven K. Gilman, Jurien Bay, WAS, Australia William S. Gilmer, Salt Lake City, UT Michael F. Gleason, Golden, CO

Robert J. Golden Jr., Coeur D'Alene, ID William P. Goranson II, Cheyenne, WY Peter J. Guest, West Vancouver, BC, Canada Donald M. Gustafson, Palm Springs, CA Michael N. Gustin, Tucson, AZ Gregory A. Hahn, Lakewood, CO Michael D. Haugen, Minneapolis, MN John C. Hilchey, Thompson, MB, Canada Glenn F. Hoffmeyer, Florence, AZ Frank P. Howald Sr., Sunnyvale, CA Joel F. Hutwelker, Pipersville, PA Sean C. Isgan, Somerset, PA Don L. Jensen, Phoenix, AZ Kathleen M. Johnson, Reston, VA Ian N. Karkaria Mableton, GA Tauno K. Kaukolin, Springville, UT Tom J. Keirn, Peachtree City, GA David C. Knight, Elko, NV Joseph M. Kridel, Phoenix, AZ John T. Lamb, Sugar Land, TX Kim A. Lapakko, Saint Paul, MN Rodney L. Leonard, East Perth, WAS, Australia John W. Lill, Toronto, ON, Canada Jeffrey A. Love, Ashland, PA Christopher B. Mapes, Kearny, AZ Derek J. McCracken, Pittsburgh, PA Michael E. McDonald, Empire, CO Jack S. McPartland, Sparks, NV Michael E. McPherson, Vista, CA Todd R. Mills, Citrus Springs, FL Robert R. Monok, Lakewood, CO Dominik A. Moro, Longmont, CO William P. Owens, Grundy, VA Steve Page, Concord, CA Michael E. Power, Toronto, ON, Canada Rocky A. Pray, Elko, NV Thomas F. Pugsley, Oakville, ON, Canada

Clifford E. Raleigh Jr., Home, PA Tommaso R. Raponi, Oakville, ON, Canada Michael D. Reid, Bessemer, MI Sandor Ringhoffer, Golden, CO Lauren M. Roberts, Fairbanks, AK Cletius G. Rogers, Smartville, CA Jeffrey A. Roschyk, Delafield, WI Joseph F. Ruzicka, Anchorage, AK Brenda K. Schladweiler, Gillette, WY Terry W. Schmidt, Mechanicsburg, PA Anders Sellgren, Marsta, Sweden Erik D. Seymour, Phoenix, AZ Lauri O. Siirama, Kuopio, Finland James R. Small, Merrill, WI Daniel F. Smith, Coos Bay, OR Robert E. Snow, Monroeville, PA Mark T. Snyder, Cedarville, MI Larry M. Southwick, Cincinnati, OH David R. Spedden, Fort Meade, FL Robert M. St. Louis, Elko, NV Mark D. Stock, Reno, NV Edward D. Thompson, Lexington, KY Jose Tobar, Globe, AZ Linda R. Torre, Charleston, WV Donald A. Wagstaff, Brawley, CA Stephanie W. Walker, Tucson, AZ Jeff N. Wallace, Green Valley, AZ Neil O. Willoughby, Scarborough, ON, Canada William W. Willoughby, Vancouver, BC, Canada John M. Willson, Vancouver, BC, Canada Carl J. Wilson, Gooseberry Hill, WAS, Australia Christopher J. Wyatt, Golden, CO Shane H. Yanagisawa, Seattle, WA Lawrence M. Zanko, Two Harbors, MN Benjamin F. Zimmerly, Carlsbad, NM

George A. Fox Conference

The 2013 George A. Fox Conference was held at the City University of New York Graduate Center on Jan. 24, 2013. The conference, chaired by Colin Lawrence, featured presentations on Innovation in Rock Tunnel Construction. The conference was attended by 334 people and generated \$47,500 in overall sponsorship contributions.

SME Annual Meeting and Exhibit

The SME and Colorado Mining Association (CMA) joint Annual Meeting was a tremendous success in spite of the inclement weather experienced in Denver, CO Feb. 24-27, 2013. SME history was made with 7,202 people in attendance, compared with 5,201 in 2012. The meeting also included 822 exhibit booths showcasing 589 companies, compared with 690 booths in Seattle, WA in 2012.

Registration information of note: international attendance at the 2013 meeting was 650 compared with 542 in 2011. Student attendees totaled 672, compared with 532 in 2012.

SME provided a more interactive app for the 2013 meeting, which was used by 2,279 attendees. In 2012, the first year the app was available, 1,681 attendees downloaded it. This product offers an additional service and value to all meeting attendees by allowing them to download information from the calendar of events and information on the technical sessions, sponsors, exhibitors and conference meeting locations.

For the third year in a row, Newmont Mining was the official meeting sponsor, contributing \$60,000. This included sponsorship of the student mixer.

The SME Foundation Dinner, with a Mardi Gras theme, was attended by 355 people. A total of 22 tables were sold to generate additional sponsorship funds for the Foundation. More people attend the dinner every year, and plans are currently being made for the 2014 event.

Two sold-out field trips were offered in conjunction with the Annual Meeting — the Cripple Creek and Victor Gold Mine on Saturday, Feb. 23, and the Henderson Mine on Thursday, Feb. 28.

Other events that were held in conjunction with the 2013 Annual Meeting included five short courses, the Young Leader mentoring session and lunch, a keynote reception on "Innovation in Metallurgical Processing," a spouse/guest brunch, new member orientation, the Rising Professionals reception, and the WAAIME members and scholarship recipient reception.



SME and CMA hosting a joint meeting continues to be successful in increasing attendance, exhibits and profitability. SME and CMA will host another joint meeting Feb. 15-18, 2015.

Symposium on Environmental Considerations

SME held a symposium on Environmental Considerations at the Marriott Charleston, WV April 14-17, 2013. The two-and-a-half-day conference, chaired by Michael Karmis and John Craynon, featured an opening plenary session followed by two concurrent technical sessions, a luncheon speaker, a banquet dinner and proceedings. The conference was attended by 229 people. Six exhibiting companies were able to display their materials during the welcome reception and daily coffee breaks.

Current Trends in Mining Finance Symposium

SME hosted the Current Trends in Mining Finance Symposium in New York, NY April 29-30 at the City University of New York Graduate Center. The conference was chaired by Tim Alch and Alan Oshiki and was attended by 148 people. Eighteen presentations were given during the two days including an Overview of the Past Ten Years.

The next symposium will take place in New York, NY April 28-29, 2014. Alch and Oshiki will, once again, be the conference chairs. The committee is currently developing program and sponsorship information. Registration and conference information will be available on the SME website in early winter.

SME

2013 **Meetings**

Cutting Edge TBM Conference

SME and the *North American Tunneling Journal* hosted the second Cutting Edge conference, which focused on megaprojects Nov. 3-5, 2013 in Seattle, WA. The conference kicked off with an ice-breaker reception on Sunday. The two-day conference featured 32 presentations, 20 exhibit booths, and three back-to-back field trips of the SR 99 Tunnel Project.

Offshore Technology Conference

In May 2013, SME participated in the Offshore Technology Conference (OTC) conference in Houston, TX. The SME booth was one of more than 2,000 booths in the exhibit hall. SME's OTC committee chaired two sessions and a panel discussion during the conference.

SME also hosted a booth at the OTC Brazil, Oct. 29-31, 2013 in Rio de Janeiro. The conference was attended by more than 15,000 people. A total of 192 papers were presented.

SME will participate as a co-sponsor of OTC Asia, which will be held March 25-28, 2014.

Rapid Excavation & Tunneling Conference

The 2013 Rapid Excavation & Tunneling Conference (RETC) was held June 23-26 at the Marriott Wardman Park Hotel in Washington D.C. Final registration for the 2013 meeting was 1,383. The exhibit was the largest in RETC history, with 188 booths. Attendees and exhibitors were pleased with the location and were interested in returning to Washington D.C. in future years for another conference.

Sponsorships generated \$53,000 in 2013, compared with \$93,000 in 2011. Due to the sold-out status of the 2011 exhibit booths, many companies opted for sponsorship opportunities in order to have exposure at the conference. In 2013, additional booth spaces were available, which caused an increase in exhibit revenue and a decrease in sponsorship revenue.

The RETC Scholarship Fund continued to support student attendance. In 2013, each scholarship was valued at approximately \$1,500, including airfare, conference registration, hotel and expenses for nine participating students. Twenty-five dollars from each paid registration was transferred to the scholarship fund to offset costs. A total of \$26,700 was collected. In 2011, \$27,050 was collected, and seven students were awarded attendance scholarships to attend the 2013 RETC.

In addition to the conference attendance scholarships, the RETC gave two university scholarships in the amount of \$2,500 each. The RETC Executive Committee will determine future university scholarships based on applications and the balance of the scholarship fund.

Arizona Conference

The Arizona Conference was held on Dec. 8-9, 2013 at the JW Starr Pass Resort in Tucson, AZ. The "mining weekend" concept continues to be successful for the Mining Foundation of the Southwest, the local section golf tournament and the Arizona Conference, as attendance continues to increase each year. A three-day short course was offered during the weekend prior to the conference. Total attendance for the conference was 502, and \$38,700 was collected in sponsorship contribution.

2014 SME Meetings

George A. Fox ConferenceJan. 28, 2014
City University of New York Graduate Center, NY

SME Annual Meeting and Exhibit Feb. 23-26, 2014 Salt Palace Convention Center, Salt Lake City, UT

Current Trends in Mining Finance
April 28-29, 2014
City University of New York Graduate Center, NY

North American Tunneling Conference June 22-25, 2014, JW Marriott, Los Angeles, CA

Critical Minerals Conference Aug. 3-5, 2014, Westin Hotel, Denver, CO

PE Course Sept. 13-17, 2014, Denver, CO

Arizona Conference Dec. 7-8, 2014 JW Marriott Starr Pass Resort, Tucson, AZ

2013 **Publications**



ship publication. Now in its 66th 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 at www.miningengineeringmagazine.com, www.uca.smenet.org or SME's website, www.smenet.org.

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 to 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 peerreviewed technical papers, content in *Mining Engineering* during 2013 included several special editorial sections. Included were special sections on coal, industrial minerals, minerals processing, iron ore, exploration, autonomous mining, surface and underground mining, aggregates, and underground and surface haulage equipment. Regional issues covered Australia, Latin America, Canada and western U.S. mining.

The January and February issues of *Mining Engineering* included the SME Annual Meeting Showguide. The March issue included the SME Publications Catalog. May was the exploration, mining and coal annual review issue. June 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 to 1999 of Mining Engineering are available to SME members to read or download.

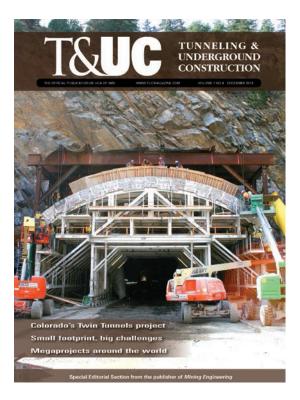


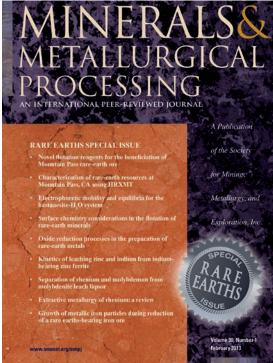
SME News

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. The SME News section of the October and April issues includes the WAAIME division newsletter.



2013 **Publications**





Tunneling & Underground Construction

Tunneling & Underground Construction 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 Divison 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. They are posted to the website after verification. Now that the **ME** site is operating, the Publications staff is planning to do a similar makeover of the **T&UC** website.

Minerals & Metallurgical Processing and Transactions

Minerals & Metallurgical Processing is published quarterly in February, May, August and November. The journal is a subscription-only publication. Subscriptions during 2013 totaled 543. Each issue is typically 54 to 64 pages in length and contains from six to 10 peerreviewed technical papers. The publication of the M&MP journal began in 1984, and 2013 is Volume 30.

S. Komar Kawatra, professor at Michigan Technical University, performed the duties of editor-in-chief for 2013. During 2013, 33 peer-reviewed papers, totaling 237 pages, were published in **M&MP**. The November issue included an index to all papers published in 2013. The February 2013 special issue contains papers geared toward minerals processing in the rare-earth industry.

Twenty-two technical papers, totaling 210 pages, will appear in *Transactions*, Vol. 334, for the year 2013. 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 18 and totaled 127 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. The Publications staff is working with the SME IT staff to have individual *Transactions* papers available for purchase online.

Publications SME Books

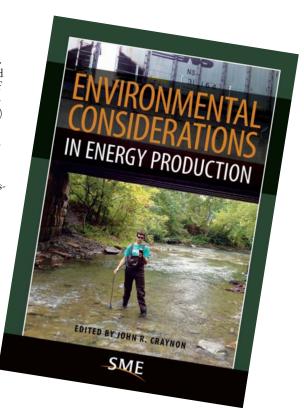


ME's book publishing program generated record sales during 2013. The number of titles has grown to 113 books and 62 eBooks. Along with traditional book sales, eBook sales and royalties continue to increase. The combination of quality industry publications and market penetration (inside and outside the Society's membership) contributed to this success.

In 2013, SME had a bookstore at various industry conferences, including the Mineral Exploration Roundup in Vancouver, BC in January; the SME Annual Meeting in Denver, CO in February; Prospectors and Developers Association of Canada in Toronto, ON in March and Coal Prep in Lexington, KY in April. In 2014, SME will have a bookstore at Roundup (January), the SME Annual Meeting (February) and PDAC (March).

A record number of 12 books are slated for publication in 2014.

In 2015, two expected best sellers are scheduled for release. The *UCA Tunneling and Underground Construction Handbook* will cover the design, construction and commercial aspects of tunnel, chamber and shaft projects. *Introduction to Mining and Mineral Processing* will present a basic instruction on the science of mining and mineral processing.



Titles published in 2013

Environmental Considerations in Energy ProductionEdited by John R. Craynon

Grouting Equipment Manual: Selection, Operation, Maintenance, and Repair By Donald C. Hegebarth

Modern American Coal Mining: Methods and Applications Edited by Christopher Bise

Rapid Excavation and Tunneling Conference: 2013 Proceedings Edited by Michael A. DiPonio and Chris Dixon

Titles acquired in 2013

The Aggregates Handbook

By the National Stone, Sand and Gravel Association

Economic Evaluations in Exploration

By Friedrich-Wilheim Wellmer, Manfred Dalheimer and Markus Wagner

Open Pit Mine Planning and Design, Third Edition

By William A. Hustrulid, Mark Kuchta and Randall K. Martin

Top sellers in 2013

SME Mining Engineering Handbook

Rapid Excavation and Tunneling Conference: 2013 Proceedings

Chemistry of Gold Extraction

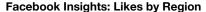
Underground Mining Methods

Mineral Processing Plant Design, Practice, and Control

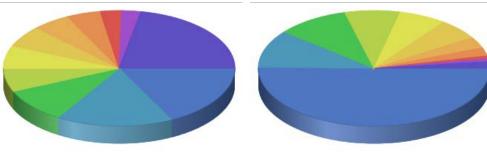
Mining Economics & Strategy

Environmental Considerations in Energy Production

Information Technology Web/Social Media



Facebook Insights: Likes by Source



Countries	Likes	Sources	Likes
United States	1,583	Page Profile	130
Indonesia	1,483	Recommended Pages	27
India	865	Mobile	26
Iran	584	Timeline	20
Pakistan	579	Search	17
Peru	542	Like Story	15
Turkey	485	Hovercard	8
Egypt	430	API	6
Canada	271	Reminder Box Invite	2
Australia	240	Ticker	2
35 more countries	1,988	22 more sources	5

Current Statistics - Since Inception

Agreed to Terms	2,513
Communities	376
Community Members	27,475
Connections Made	1,964
Content Contributions	2,219

Engagement Score	675,495
People with > 2 Friends	369
Profiles Created	688
Profiles with Pictures	563
Total Logins	17,293
Unique Logins	2,686

SME Webinars: Professional Development on Your Terms

SME's webinar program debuted in 2012 with eight "hot topic" sessions. Recognizing member needs for on-demand professional development, SME expanded its webinar program in 2013, with an increased focus on technical programming. In 2013, 17 webinars were held, with a total attendance of more than 260. Popular 2013 topics included:

- What Factors Drive Metal Prices?
- Passive Treatment of Mine Influenced Water.
- Simultaneous Pit and Waste Dump Schedule Optimization.

- What Will Halt the Worldwide Decline in Equipment Performance?
- Fatigue Risk Management Systems in Mining.
- On-site Minerology for Operators.

SME webinars provide technical information and professional development to members who typically are not able to attend SME's meetings, conferences or short courses. Webinars provide relevant information in an easy-to-access format, requiring no travel and require very little time (approximately one hour) away from normal work duties. Interested members and nonmembers may participate in SME's live webinar sessions or purchase recordings of previously held webinars for on-demand viewing as their schedules allow.



Coal & Energy

Vladislav Kecojevic 2013-2014 Coal & Energy Division Chair

he Coal & Energy (C&E) Division membership as of Dec. 31, 2013 was 2,121, of which 342 are student members. This reflects an increase of 38 members from the total of 2,083 members in 2012. The Division's retention rate is 87.03 percent.

2014 Annual Meeting programming

The C&E Program Chair, Bob Kudlawiec, presented an overview of the technical program for the 2014 Annual Meeting in Salt Lake City, UT. Twenty-one C&E sessions, with 128 papers, have been scheduled. These sessions include: Best of Ground Control; Breathing Air Supplies; Carbon Management; Coal Geology - Practices and Methodology; Coal Preparation; Developments in Health and Safety; Dust Control; Employee Engagement/Workforce Trends; Explosives; Human Factors; Mine Emergency Response; Mine Environmental Issues; Project Management for Coal Miners; Research and Development; Surface Mining Innovations; Surface Mining Processes and Practices; Underground Mining Innovations; Underground Mining Processes and Practices; Ventilation Best Practices; Ventilation Innovations; and Young Leadership in Trying Times.

Unit committees

Discussions were held about eliminating or reorga-

nizing the C&E unit committees at the SME midyear meeting. At present, some unit committees are not active and membership positions remain vacant. The difficulty in recruiting members from industry who have the time and commitment for active participation was also discussed. It appears that there is no consensus among C&E Executive Committee members to eliminate some of these committees. This issue will be discussed again at the 2014 SME Annual Meeting in Salt Lake City, UT.

Scholarship rules and awards

New scholarship features for the coming year will be introduced. C&E and Marshall criteria are now the same, so duplicate applications will be eliminated. The new application process only allows qualified applicants to submit. Some forms were consolidated, so fewer pages will be seen. Since this has been a new process, there may still be changes needed. Last year there were 88 applications. If this process had been in place, the Division would have had about 40 applications. There is still work to be done on funding international scholarships, what to do with the UG research grant that was suspended this year and how much to give each recipient.

Fundraising

The C&E Division will offer two fundraising options in 2014: a silent auction and table sponsorships at the Division luncheon. Barbara Arnold is serving as the fundraising chair and will be spearheading these efforts.

Environmental

Robert Reisinger 2013-2014 Environmental Division Chair

he Environmental Division's (EVD) membership as of Dec. 31, 2013 was 1,032, of which 124 are student members. This reflects an increase of 112 members from the total of 920 members as of Dec. 31, 2012. The Division's membership retention rate is 87.66 percent.

2014 Annual Meeting program

Program Chair, Patrick Gorman, reported that there are 95 presentations distributed in 16 sessions, including the Water in Mineral Processing Symposium and a "hot topic" session. Gorman has asked all session chairs to write an executive summary of the talks in their session in the hope this will help align presentations. He is also asking

chairs to review for quality – no product pitches. EVD is not planning a field trip this year.

Environmental Division Membership Committee

From the SME midyear report, membership in the EVD grew by 115 people. Bob Reisinger, Anne Williamson and Rob Mongrain are working with a list of lapsed memberships. About 15 people had lapsed memberships within companies active in the EVD. The EVD will contact these people through their organizations. Bob Reisinger will get contact names for each company. It appears that most lapses have been from students. We need to expand the visibility to schools, possibly through scholarship activities, and try to establish local student chapters.

Awards

The committee discussed the current processes for the Outstanding Paper and Outstanding Presenta-

tion Awards. Patrick Gorman noted that the instructions for these awards may need to be revised, and that there should be a better way to quantify and capture presentations. There have been tangible benefits to the Division recognizing outstanding papers and presentations.

Scholarships and awards

Liane George drafted an article for *Mining Engineering* highlighting the EVD scholarship and process to apply. There was discussion concerning how to better publicize the EVD scholarship to attract

the right students. Future members of the Environmental Division may not be from the typical mining schools. The Division needs to try other avenues to put this information in front of students. There is a need to update Environmental Scholarship so it includes more student applicants from disciplines other than mining engineering or geology.

Scholarships and awards for the Division will be presented at the Environmental Division luncheon during the annual meeting.

Industrial Minerals & Aggregates

Abani R. Samal 2013-2014 Industrial Minerals & Aggregates Division Chair

he Industrial Minerals & Aggregates Division (IM&AD) membership as of Dec. 31, 2013 was 1,004, of which 107 are student members. This reflects an increase of 58 members from 946 in 2012. The retention rate for the Industrial Minerals & Aggregates Division is 90.7 percent.

2013 midyear meeting

Many members of the Industrial Minerals & Aggregates Division Executive Committee were unable to attend the 2013 midyear meeting in San Diego, CA. Instead of a meeting, a conference call was held. Key discussions and action items are outlined below:

- Approval of 2013-2014 award recipients.
- Annual Meeting and other sponsorships

 a \$3,000 sponsorship from Cytec for
 2014 was obtained. There was discussion regarding the acceptance of lesser amounts, down to a \$1,000 minimum.
 The Division is also looking for technical session sponsors.

IM&AD chair's recognition

The committee approved a proposal by Abani Samal to add "IM&AD Chair's Recognition" to the slate of awards presented during the Division's luncheon. The purpose of this award is for the Division chair to provide personal recognition of and appreciation to one or more individuals who have gone above and beyond to assist the chair and/or the Division during the year.

Division involvement

The committee discussed ways to get more SME members who identify themselves with the industrial minerals industries to participate in the annual IM&AD business meeting that occurs after the luncheon each year. It was agreed that an agenda for the business meeting would be prepared and distributed and that any interested individuals would be allowed to enter the luncheon after 1:30 pm.

IM&AD-sponsored webinar and other events

Abani Samal proposed and the executive committee agreed to host a webinar sponsored by IM&AD. The webinar was held on Nov. 12, 2013. Dr. Vishal Gupta was the speaker. The earnings from the webinar were transferred to the scholarship fund. The committee applauded this initiative and agreed to set up an ad hoc committee to explore possibilities of hosting seminars and webinars throughout the year.

IA&MD new website

By the time this report was written, the beta version of the new IM&AD website was under review by the committee. The website is a microsite created within the SME Community and will allow the division to connect more actively with its members.



Mineral & Metallurgical Processing

Corby Anderson 2013-2014 Mineral & Metallurgical Processing Division Chair

he Mineral & Metallurgical Processing Division's (MPD) membership as of Dec. 31, 2013 was 2,557, of which 219 are student members. This reflects an increase in membership of 218 members from the total of 2,339 in 2012. The Division's retention rate is 90.04 percent.

2014 Annual Meeting programming

MPD has 17 sessions for the 2014 SME Annual Meeting. Each session has at least four papers, and some sessions have as many as nine papers and may need to be split into two sessions.

Session sponsorship

There was considerable discussion regarding the fact that annual meeting session sponsorships do not direct any funds to the Division. Rather, those funds go to the annual meeting budget and are used to offset the actual costs of the session being sponsored. The committee members were surprised and disappointed by this information. Further inquiry and research revealed that the session sponsorships generated during the past two years have fully supported the symposia and associated events that they were intended to support.

Award funding

MPD continues to seek funding for its awards. Awards had to be ordered in FY2013, so the Gaudin, Richards and Wadsworth award funds went into the red. The committee voted to transfer funds from the Division's general fund into the award funds in order to make them current.

Scotch Nightcap

The committee discussed how to host the Scotch Nightcap in Salt Lake City, since the strict liquor laws do not allow the scotch to be donated. It was decided that event attendees would have to redeem drink tickets for scotch tastes in order to help cut down on the amount of scotch consumed, thereby helping to cut down on the amount of scotch that MPD has to purchase.

Division funding

To help grow revenue in the Division's general and awards funds, it was decided that the Division's chief fundraisers, the MPD calendar and the Scotch Nightcap, would be marketed not as fundraisers for the division's scholarship fund but, rather, as fundraisers for the Division, with proceeds benefitting the Division's general, awards and scholarship funds. This change will be effective for the 2015 MPD calendar and 2015 Scotch Nightcap. Currently, MPD has a large, almost self-sustaining, scholarship fund and a low general fund. There is a constant need to backfill award funding. Handling funding in this way for the next five years should move all funds more substantially into the black while not negatively impacting the MPD scholarship fund.

Mining & Exploration

George F. Sanders 2013-2014 Mining & Exploration Division Chair

he Mining & Exploration (M&E) Division's membership as of Dec. 31, 2013 was 6,059, of which 785 are student members. This reflects an increase in membership of 234 from the 5,825 members in the Division as of Dec. 31, 2012. The Division's retention rate is 90.43 percent.

Young Leaders Program

Sam Shoemaker complimented the Young Leaders Committee (YLC) for being energetic and doing a lot of great work. The committee discussed the need for the Division to continue to coordinate and communicate better with the Young Leaders Committee to continue to increase involvement. The M&E Division recognizes the need to continue to

educate, improve communications from divisions to YLC members.

Award nominations

The committee discussed the 2013 award nominations. Award committees need strong chairs, and each Division and each award committee needs to solicit nominations as needed. M&E past chairs work to ensure that M&E is represented in the nomination process for M&E, SME and AIME awards, but everyone needs to do a better job on this.

Scholarship task force report

Bill Warfield reported on the work of the Scholarship Task Force. Last year was first year using the new online application system and tremendous numbers of scholarship applications were submitted. A task force was formed in February 2013 to improve the scholarship application process. There are now filters on scholarship applications to ensure that applicants are

truly eligible for the scholarships for which they are applying. This will, hopefully, make the application process more selective. This year's scholarship committee will have to ensure the anticipated improvements are being realized or suggest further improvements. Warfield encouraged the M&E Scholarship Committee to watch for one student getting multiple scholarships from various divisions and try to spread the awards across more applicants.

M&E Division handbook

Catherine Dreesbach wants to create an M&E Division Handbook containing the roles and responsibilities of the officers and committee chairs. Some position descriptions are available and some documents exist to explain certain items. There is a need to gather the information and make it accessible. This will help internally, but it will also help the Young Leaders and others when they are looking for ways to be more involved.

2014 program update

Shoemaker updated the committee members on the progress of the technical program for the

upcoming Salt Lake City annual meeting. There will be 32 sessions including two "hot topic" sessions on the Kennecott slide. Other sessions include: Geology (four sessions), Stakeholder Engagement and Corporate Responsibility (two sessions), Mine to Mill Optimization (two sessions), Automation in Mining (two sessions) and Underground Mining Projects and Innovations (two sessions).

Global Mining Standards and Guidelines Group

Progress on this initiative is slow. Original equipment manufacturers (OEM) need to agree that this is a good program, and they need to agree to change. This is difficult, though, because OEMs do not want to give up any intellectual property or competitive advantage. OEMs have given a little money but not much presence. Mining companies will have to engage and drive the OEMs, otherwise there is little hope of change. SME has a vested interest and all other contributors need to ensure that there is some follow through or this initiative will have been a waste of time and money.

UCA of SME

William W. Edgerton 2013-2014 UCA of SME Division Chair

he Underground Construction Association of SME Division's (UCA) membership as of Dec. 31, 2013 was 1,139, compared with 1,047 in 2012. That includes 859 professional members, 172 corporate/sustaining members, 11 registered members, 11 senior/honorary members and 86 students. The Division's retention rate last year was 87.01 percent. Many of those new members were recruited at UCA-sponsored conferences, including the SME Annual Meeting, the George A. Fox Conference, the Rapid Excavation & Tunneling Conference and the Cutting Edge Mega Projects Conference.

Strategic plan

In November 2013, following the Cutting Edge Conference in Seattle, WA, the UCA Executive Committee began crafting a strategic plan for the Division. The objective was to develop a three- to five-year strategic and tactical plan for the Division to adhere to going forward: Review and ratify the UCA mission; define relevant stakeholders and target audiences for UCA activities; establish key goals that are critical to achieving the UCA mission; map out strategies that support all UCA goals; and

clarify the governance of the Division. Following a day of brainstorming, the Executive Committee developed a proposed mission statement:

"The mission of the UCA is to promote the responsible development and use of underground space and facilities."

The committee met again after the George A. Fox Conference in January 2014 to finalize and adopt the strategic plan.

UCA meetings

The 2013 George A. Fox Conference was held at City University of New York Graduate Center on Jan. 24. The theme of the conference, chaired by Colin Lawrence, was "Innovation in Rock Tunnel Construction." The conference was attended by 334 people and generated \$47,500 in sponsorships.

SME and the *North American Tunneling Journal* hosted the second Cutting Edge conference, which focused on mega projects, Nov. 3-5, 2013 in Seattle, WA. The conference kicked off with an ice-breaker reception on Sunday. The two-day conference featured 32 presentations, 20 exhibit booths and three back-to-back field trips to Seattle's SR 99 Alaskan Way Viaduct tunnel project.

The 2014 North American Tunneling Conference will be held June 22-25 in Los Angeles, CA. Its theme is "Tunneling — Mission Possible."



WAAIME

Elisabeth Price 2013-2014 WAAIME Division Chair

t the midyear meeting in San Diego, CA, the WAAIME Executive Committee approved the creation of a new WAAIME section and member-at-large grant to help WAAIME members with their special programs. Sections or members-at-large will submit requests for funds to the WAAIME Executive Committee. The 2013-2014 WAAIME Executive Committee approved spending up to \$20,000 for this program.

In addition, at the midyear meeting, the WAAIME

Executive Committee approved the creation of the WAAIME Founders Award to honor outstanding WAAIME members. The WAAIME Executive Committee is respectfully requesting that the SME Board of Directors approve the new WAAIME award.

There was a discussion with the ad hoc committee investigating the possible creation of a nontechnical division with respect to a possible restructuring of the WAAIME division within SME. The goal is to ensure the continuing existence and relevance of WAAIME. WAAIME representatives are also discussing possible relationships with the SME Foundation.

2013 WAAIME Scholarship Recipients

Colorado School of Mines

Dong Joon Youn, Evody Tshijik Karumb, Joseph Grogan, Leo Conner Weiman

Missouri University of Science & Technology

Dennis Chieze Duru, Ethan Faber, Landon Kelsey, Mai Huynh, Michael Ortmann, Nicholas Alan McFarland, Matthew Coy, Patrick Nichols, Patrick Niemuth, Saeid Reza Dindarloo, Sisi Que

Montana Tech

Niklas Folke, Scott R. McCue

Pennsylvania State University

Christopher Brown

Purdue School of Engineering and Technology

Hamed Zamenian

South Dakota School of Mines and Technology

Claire Leuschen, Daniel Crecco, Jennifer Ann Galvin, Justin Brick, Justine Victoria Sorensen, Myriah Santistevan, Timothy S. Fountain, Yiwen Sun

The Ohio State University

Katrina Boos

University of Arizona

Andrew Taylor DeSantola, Ashlyn Hooten, Jesus Garcia, Sarah Beal, Taghi Sherizadeh

University of Kentucky

Austin Jarvis James Brock, Colton Chase Parsons, Gabriel Nickell, Katy Darlene Petry, Majid Mohammad Rezaee, Seyed Hassan Amini, William Tyler Meadows

University of Nevada Reno

Abijah Bauer, Austin Youngblood, Dennis Edward Reppond, Ebrahim Karimi Tarshizi, Pedram Roghanchi, Rahul Thareja, Timothy John Kiley

University of Utah

Aaron Larry, Ashley Hodgson, Dillon James Cadwell, Drew Pattrick Howard, Erik Spencer, Hussein Al rubaye, Jordan Prestwich, Kendal Bergman, Mark Smith, Natalia Healey, Nathan Robert Bench, Olan Nielson, Russel Spaulding, Taylor Colligan

Virginia Polytechnic Institute and State University

Andres Dahmen, Angela Rusconi, Aubrey Athey, Chelsea Barrett, Christopher Hidy, Corey Burton, Greg Jennison, Izaak Dail, Jack Maxey, Jason T.F. Gurrister, Marion King, Megan Elizabeth Huber, Melissa Volkmar, Meredith Scaggs, Mohamed Elamraoui, Patrick Reeder, Russell Jones, Tyler Daugherty, Tyler Faulkner, William R. Thomas

West Virginia University

Mara Hissom

Report from the SME Foundation President

s we reflect on 2013, we are encouraged by the results of *Creating Global Prosperity:*The Campaign for Mining fundraising and are pleased to report that the Foundation is on solid footing. For the first time in the SME Foundation's (SMEF) history, fiscal year 2013 ended with a surplus. In addition, the Foundation received funding for two new programs, a Ph.D. grant program and Miner's Give Back (a global community outreach endeavor) and will implement them in 2014.

The Foundation's mission is to further scientific, technical and education programs and be the primary resource for mining and underground construction information for all stakeholders. To remain true to this mission, we strive to improve our services every year. In 2012, we began *The Campaign for Mining* to raise significantly more funds to support existing programs — The Minerals Education Coalition (MEC), the Professional Engineers Exam (PE) Committee and the ABET program.

We have strengthened our corporate support by implementing the Corporate Roundtable program. This gives companies an opportunity to get involved in supporting SMEF programs while receiving small benefits in the form of company recognition. The Foundation will build on these accomplishments in FY2014 by expanding the MEC, implementing new programs and balancing budgets for exciting programs such as PE and ABET.

I thank the membership for its continued support. The time, talent and financial contributions of our volunteers make the Foundation a top quality organization. We will continue to grow and improve the programs under the Foundation umbrella to better serve the SME community in the years to come

Thank you,

Bart Hyita

SME Foundation President

SME Foundation



he mission of the SME Foundation (SMEF) is to further scientific, technical and education programs, and to be the primary resource of mining and underground construction information. The Foundation achieves these goals through K-12 curricula and community outreach of the Minerals Education Coalition (MEC), numerous scholarships, accreditation of mining schools through its participation in ABET and supporting the Professional Engineers (PE) Exam Committee.

The close of fiscal year 2013 marks the most successful fundraising year for the SMEF. At the 2013

SME Annual Meeting, Creating Global Prosperity: The Campaign for Mining was launched. This campaign has brought unprecedented support to the programs under the SMEF umbrella. Desired growth of the Foundation can now begin in FY2014 with expansion of the MEC, implementation of new programs and balanced budgets for existing programs such as PE and ABET.

SMEF would like to thank the Corporate Roundtable partners who gave extensive financial assistance in fiscal year 2013:

- Freeport-McMoRan Copper & Gold (\$200,000)
- Caterpillar (\$100,000)
- J.H. Fletcher & Co. (\$100,000)
- Murray Energy (\$100,000)
- Newmont Mining Corp. (\$100,000)
- Alliance Coal (\$50,000)
- Cliffs Natural Resources (\$50,000)
- CONSOL Energy (\$50,000)

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SME Foundation

- Joy Global (\$50,000)
- Peabody Energy (\$50,000)
- Rio Tinto (\$50,000)
- Mining & Metallurgical Society of America (\$40,000)
- Alpha Natural Resources (\$25,000)
- Drummond Co. (\$25,000)
- Imerys (\$25,000)
- Laurita Energy LLC (\$25,000)

This growth has provided not only program opportunities, but also staffing changes and additions within SMEF. In November 2012, SMEF hired a new Foundation Development Coordinator, Christina Page, to assist with small corporate and individual donations, donor recognition and Foundation events. On April 1, Sharon Schonhaut was appointed Director of Education and Foundation to provide leadership and guidance to all educational activities within SME and SMEF, as well as coordinate the needs of these programs and Foundation fundraising.

New programs implemented or in development include:

- Finalization of the Rong Yu Wan Scholarship Fund. The Wan family has completed funding of the endowment, and the award guidelines are in final development.
- A Ph.D. grant program (in early development).
- The Miners Give Back program (to be reformatted and implemented).
- The Foundation's quarterly newsletter was successfully re-implemented and the webpage has been redesigned.
- A comprehensive donor recognition program was created in the fall of 2012 and launched at the 2013 SME Annual Meeting. The program has depth and room for donor growth.

The John T. Boyd Challenge has now been met by 63 individuals, companies, SME divisions and other entities who have contributed gifts to the Foundation of \$10,000 or more individually or \$50,000 as an organization. Lifetime giving

is now being recognized through a multi-tiered program. In 2013, the Foundation acknowledged two individuals at the \$25,000 level, two individuals and nine corporations at the Ruby Circle level, one individual and one corporation at the Emerald Circle level and one individual at the Diamond Circle level. For complete information about all the recognition levels, please visit the SME Foundation webpage http://community.smenet.org/SME-Foundation/Programs. The Foundation gives great thanks to all of its donors who make the SMEF programs successful.

Scholarships

The SMEF scholarship programs have grown during the last two years. For complete information on all of the scholarships that are offered, please consult the SME Foundation webpage http://community.smenet.org/SMEFoundation/home/.

In 2013, J.H. Fletcher Co. awarded its first scholarships to two recipients: Andrew Neilson, a junior at the University of Utah majoring in mining engineering, received \$4,000; and Hannah McNally, a senior at Missouri University of Science & Technology majoring in mining engineering, received \$2,000. The MMSA/SMEF Past Presidential Scholarship was awarded to William Walker, a senior at the University of Kentucky majoring in mining engineering; and Tyler Morgan, a senior at the University of Arizona majoring in mining engineering. Each received \$4,000.

Four Syd S. & Felicia F. Peng scholarships of \$5,000 each were awarded to: Biao Qiu, a Ph.D. student in the Department of Mining Engineering at West Virginia University; Sean Warren, a Ph.D. candidate in geoengineering at the University of Nevada Reno; Donovan J. Benton, a Master's degree candidate in mining engineering at Southern Illinois University Carbondale; and Xu Ma, a Ph.D. candidate at Virginia Tech.

The Scott McIntosh Scholarships were awarded to: Colton Parson, a senior at the University of Kentucky majoring in mining engineering; and Kyle Lindahl, a senior at the Colorado School of Mines majoring in mining engineering. Each received \$10,000. Simon Ortega, a junior at the University of Alaska Fairbanks majoring in mining engineering, received \$12,000.

In total, the SMEF gave 11 scholarships totaling \$66,000 to SME student members.



SME Foundation Minerals Education Coalition



he Minerals Education Coalition's (MEC) second year of operation is best characterized as far-reaching, highly productive and data-driven. Students, educators and other mining and nonmining industry individuals accessed the MEC's new website containing new and/or updated curriculum and participated in exciting hands-on outreach activities.

The Minerals Education Coalition's mission is to provide direction and oversight of SME's fact-based K-12 minerals education activities from development to distribution and to inform and educate the general public about the importance of mining in their everyday lives.

Several distinct, yet equally important groups, are the targeted audiences for the activities of the MEC. Specifically:

- K-12 students, who are the consumers of the future and potential employees of the mining industry.
- Teachers of K-12 students, who will provide the knowledge and skills needed to provide factual and meaningful instruction and experiences for youth.
- SME members in sections, who locally provide accurate and significant educational activities for K-12 students and the general public.
- The general public, who are the beneficiaries of mining and minerals in their lives.

The MEC Committee in 2013 consisted of 12 members, with Mike Sheahan serving as chair and Pam Wilkinson as vice chair. Members held two in-person meetings and three conference calls. They selected the recipients of all MEC awards, which will be presented at the 2014 SME Annual Meeting. They also assisted with fundraising and public outreach, and provided guidance and coordination with other SMEF committees.

The MEC website, www.MineralsEducationCoalition.org, was activated in late February 2013. As indicated by the menu titles, there is a wide range of available lessons, activities and resources for K-12 education and use by the general public and an online store for low-cost supplemental materials.

K-12 Curriculum Projects

A new SMART Board lesson about coal was developed and posted on the MEC's website. It was reviewed by teachers and industry experts for instructional and content accuracy.

Copper in Our Electrical World

MEC partnered with the Edison Tech Center to produce a 19-minute video about the critical need for copper in our electrical world. "Copper in Our Electrical World" was released at the 2013 SME Annual Meeting. It explains locating, extracting, processing, transporting and using copper in manufacturing products related to electricity, particularly copper's conductivity properties from light bulbs to high tech needs. The audience for the video is high school students and the general public. Pending the success of the copper video, plans include developing additional videos featuring other minerals involved in electrical products. In the first 11 months of the video being posted on MEC's "Minerals in Your Life" YouTube channel, it has had more than 2,200 viewings.

El Mármol Azul / Creación de un Universo

El Mármol Azul / Creación de un Universo is an informative and attractive poster that has been translated from MEC's popular English version of the "Blue Marble" Periodic Table of the Elements so that students and professionals in Spanish-speaking countries and in bilingual education programs in the United States are able to benefit from our educational materials.

MEC Outreach Projects

Monthly updates and feature items about MEC have been included in *Mining Engineering* magazine monthly as well as several SME's eNews blasts sent to members electronically.

Each year, the Minerals Education Coalition participates at three National Science Teachers Association (NSTA) Area Conferences to provide K-12 teachers, science coordinators, school administrators and informal science educators with credible and comprehensive materials about minerals and why mining is important to our lives and lifestyle. The dates, locations and chair of the regional conferences were:

SME

SME Foundation Minerals Education Coalition

- Oct. 24-26 in Portland, OR (Bill Hancock, chair).
- Nov. 7-9 in Charlotte, NC (Randy Bechtel, co-chair).
- Dec. 12-14 in Denver, CO (Dick Beach, chair).

The Minerals Education Coalition staff and volunteers participated in several 2013 summer family events to let military families know that they are appreciated while delivering curriculum content and activities to teach about the importance of minerals and mining.

MEC 2013 Outreach Events

- February Mining and Metallurgical Society of America/CO Section, Denver, CO.
- February SME Annual Meeting, Denver, CO.
- February PDAC Conference, Toronto, Canada.
- March Colorado School of Mines class presentation, Golden, CO.
- March 35th International Intercollegiate Mining Games, Golden, CO.
- June Denver Mining Club, Denver, CO.
- July Boy Scout Jamboree, The Summitt,
 WV
- July STEM Bootcamp, U.S. Air Force Academy, Colorado Springs, CO.
- August Challenger STEM at Buckley Air Force Base, Aurora, CO.
- August Challenger STEM at Peterson Air Force Base, Colorado Springs, CO.
- September Denver Gem & Mineral Show, Denver, CO.
- October Cool Science Carnival, University of Colorado, Colorado Springs, CO.

- October NSTA Regional Confernece, Portland, OR.
- October Geological Society of America National Conference, Denver, CO.
- November NSTA Regional Conference, Charlotte, NC.
- December Northwest Mining Association Conference, Reno, NV.
- December NSTA Regional Conference, Denver, CO.

Soccer Activity trifold

Sixteen thousand (16,000) copies of the MEC's "Soccer Activity" trifold were inserted into the AGI's Earth Science Week packets distributed to educators nationally. MEC is also featured as the activity of the month for March 2014 to demonstrate the conductivity properties of various minerals. MEC and SME were prominently featured on the Earth Science Week promotional poster and on the packet cover as sponsors of Earth Science Week.

The Minerals Education Coalition initiated contact with The Geological Society of America (GSA) to enhance our relationship, as the organizations have mutual interests in the advancement of promoting education and outreach for each organization's members and the general public. On Saturday, April 25, 2013, SME was recognized as an Associated Society by GSA's board of directors. With this designation, the MEC and SME jointly exhibited its programs' materials and membership benefits at the GSA annual meeting held in Denver, CO from Oct. 27-30, 2013. In addition, SME, MEC and GSA will have hotlinks to each others' websites, and SME staff will participate at GSA meetings and conferences with 63 other Associated Societies.

MEC offers low-cost materials to supplement classroom instruction and for public awareness and community outreach on its website's online store.

MEC's 2013 NSTA area conference statistics

Location	Total Conference Attendees	# MEC reached	# States Reached (also Washington, DC and Canada)	% attendees visit our booth	% Elementary School Teachers	% Middle School Teachers	% High School Teachers	Other Educators	Unspecified
Portland, OR	2,346	489+	26	21%	7%	33%	20%	10%	30%
Charlotte, NC	2,526	679+	32	27%	16%	23%	17%	18%	26%
Denver, CO	1,990	843+	40	42%	10%	23%	21%	16%	31%
		1	Three Conferen	ces' Averages	11%	25%	19%	15%	29%

SME Foundation Professional Engineers Exam

he 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. 24, 2014. For the years 2005 through 2013, the examinee count equaled 47, 49, 42, 47, 71, 70, 75, 72, and 84 respectively.

The percent passing the PE exam for first time examinees for the years 2006 to 2013 are 84 percent, 67 percent, 80 percent, 73 percent, 78 percent, 80 percent, 75 percent and 71 percent respectively. The exam continues to show stability and effectiveness.

As of Dec. 31, 2013, the 2014 exam was assembled and the 2015 exam is in the process of assembly. The October 2014 examination will be pretested by the PE Exam Committee at its meeting in Salt Lake City, UT Feb. 23, 2014. The October 2015 examination will be submitted Feb. 27, 2014 to NCEES. The preparation cycle for each exam is about 18 months.

The 2013 exam was the fifth exam under the specification developed in 2008 as part of the periodic PAK (Professional Activities and Knowledge) study and cut-score analysis. This is the method of calibrating examinations every seven years to ensure applicability. The M/MP specification and exams are performing well, as evidenced by the low count of problems flagged for review. Only four problems were flagged on the 2013 exam. As part of

Mining /
Mineral
Processing PE
Exam Takers

the PAKs process, a new study guide was developed in 2010 and continues to be used. This SME book, Study Guide for the Professional Licensure of Mining and Mineral Processing Engineers, seventh edition, is in its second printing. It will be updated after the next PAK study.

The review course for the 2013 exam was held in St. Louis, MO in September 2013, under the direction of Dr. Raja Ramani. Approximately 48 engineers (37 SME members, 11 nonmembers) completed the review course, versus 38, 56 and 40 for the previous three years. Feedback from the participants was favorable. Revenue generated by tuition more than covered the cost of conducting the review course. The next review course is tentatively scheduled for Sept. 13-17, 2014 in Denver, CO.

The SME PE Exam Committee coordinator attended NCEES meetings in Clemson, SC and Atlanta, GA, Jan. 18-19 and Oct. 11-12, 2013, respectively, to report to the NCEES on the performance of the M/MP PE exam and to participate in the work of the Committee for Examinations for Professional Engineers (EPE). The committee coordinator will attend a Feb. 28-March 1, 2014 EPE meeting in Clemson, the first of the two required NCEES meetings per year.

The EPE Committee is composed of 16 appointed professional engineers who represent the state boards of professional licensure. It oversees the development and scoring of the FE and PE exams. At the Oct. 11-12, 2013 meeting, the EPE continued work on the following major committee assignments:

- The PE exam will be transformed from pad and pencil to a computer-based administration. To assist the progress of this transformation, each professional society will work on assembling references in electronic format.
- The levels of statistical performance for the problems will be refined and placed in the exam assembly manual.
- The practical relevance of exam problems will be reviewed to ensure that the exams are not becoming too academically oriented.

The SME PE Exam Committee continued participating in the monthly meetings of the Licensing That Works Committee (LTW). This committee is composed of engineering societies that oppose an initiative by various concerns to increase the educational credential for becoming a professional engineer from a bachelor's degree to master's degree

100

80

60

40

20

2005 2007 2009 2011 2013

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SME Foundation Professional Engineers Exam

or equivalent study (MOE). The SME officially continues to oppose the MOE initiative working through the LTW. Recently, the Society of Biological Engineers and the Society of Plumbing Engineers joined LTW. For 2013, the MOE initiative was successfully tabled. For example, the Montana Board of Professional Engineers and Professional Surveyors said they will not adopt the MOE. Meetings of the Education Committee of the NCEES in 2013 showed a preference toward MOE, but that opinion was not held by a majority of members. More groups of engineers are seeking alternatives to MOE, such as continuing education.

As of Dec. 31, 2013, 370 problems are in the bank for use on future exams, and more than 60 problems are in various stages of preparation. Three reviews plus one final review are required before submittal to the bank. For 2013, 20 problems were sent to the bank, and 50 are in the final review of the PE Coordinator. The 40-member SME PE exam committee performs excellently in writing and reviewing problems. This is most important, as each PE examination requires a minimum of 20 new problems, 25 percent of the 80-question, multiple-choice examination.

Every two years, each engineering exam is audited by the NCEES. The October 2012 M/MP PE exam received an audit. The audit identified some minor deficiencies but, overall, the director of the NCEES said that the exam passed well and showed excellent organization. The deficiencies that are being corrected in future exams include a more precise distribution of question types, as compared to the exam specifications. These areas are mine maintenance, power distribution, and mill materials management and usage. As of Dec. 31, 2014, 95 percent of the audit findings have been addressed.

On Nov. 16-17, 2013, a special meeting of 13 SME PE Exam Committee members, plus the committee coordinator, was held at NCEES headquarters in Clemson. NCEES reimbursed the travel expenses of the attendees. The purpose of this meeting was to advance problem writing and review, analyze problems from the October 2013 exam and to advance the computer-based testing conversion. This meeting, which was in addition to the committee meeting at the SME Annual Meeting, was muchneeded and highly successful. The 2012 committee chair, Jamal Rostami; the 2014 chair, Michael Schlumpberger; and the 2015 chair-elect, Rahul Bhaduri, attended this meeting.

There is an ongoing problem of low scores for mining-engineering participants in Fundamentals of Engineering (FE) exam, typically taken before



graduation. This exam must be passed before a candidate can sit for the PE exam. The issue was presented to the PE Committee at its February 2013 workshop by members of the SME Education Committee. PE Committee member Andrea Brickey has conducted a survey of various schools to determine passing rates and FE exam policies. A report will be presented at the committee workshop in February 2014.

Heather Dougherty has represented the committee at meetings to review the results of electronic FE exams. She will report to the committee and to the SME Board of Directors on the implications to our society and mining profession, if any, at the 2014 Annual Meeting. This work is a prelude to the transition to a computer-based PE exam.

On Sunday, Feb. 23, 2014, the PE Exam Committee will hold its regular meeting and workshop at the Hilton Hotel, in conjunction with the SME Annual Meeting in Salt Lake City, UT. The 2014 exam will be pretested and problems reviewed for the 2014 exam. A workshop will be given in writing and reviewing problems under new NCEES rules and in using the secure NCEES online Basecamp computer site. The meeting will also include examination problem writing and reviewing of new problems for inclusion into the M/MP data base (the bank).

Jamal Rostami served as the 2013 committee chair, Michael Schlumpberger is the chair in 2014, and Rahul Bhaduri will be the chair in 2015.

SME Foundation **ABET**

BET (Accreditation Board for Engineering and Technology) is a specialized accreditor that reviews degree-granting, academic programs in applied science, computing, engineering and engineering technology disciplines. ABET ensures that programs meet the standards necessary to produce graduates who are ready to enter the technical professions.

Currently, ABET accredits more than 3,200 programs in applied science, computing, engineering and engineering technology disciplines at more than 670 colleges and universities in 24 countries.

SME Program Evaluators completed four SME accreditation visits during the fall of 2013:

 University of Minnesota — Twin Cities — Geological Engineering Program (B.S.) was visited by Eric P. Sprouls on Sept. 29 - Oct. 1, 2013.

- Tomsk Polytechnic University Geological Engineering (B.S.) was visited Earl Hoskins Nov.10-13, 2013.
- Universidad Politecnica de Madrid Mining Engineering (M.S.) was visited by David Eyer Nov. 9- 12, 2013.
- Virginia Polytechnic Institute and State University — Mining Engineering (B.S.) was visited by David Eyer Oct. 13- 15, 2013.

The visits reports are on file and will be presented to the ABET Visitor Selection Committee at the 2014 SME Annual Meeting during a closed meeting.

At the fall 2013 ABET Board of Directors meeting, Arden Davis completed his service as SME-AIME representative director. Gary Skaggs is the incoming SME-AIME representative director on the ABET board and has been named by the ABET President, Monte Phillips, to the Governance Task Force.

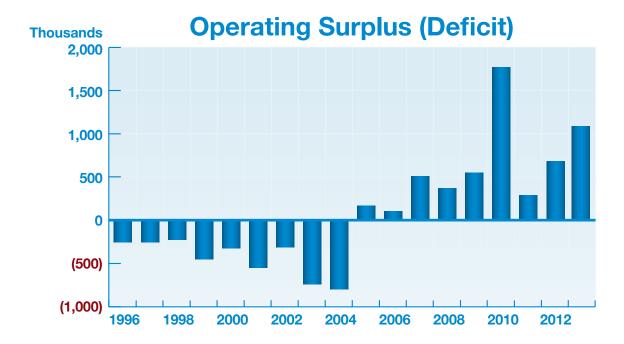




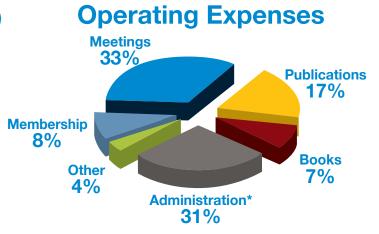
liscal 2013 revenue from operations was better than last year by 18 percent and better than budget by 8 percent. This marks the ninth consecutive year of operational surplus. FY 2013 operational surplus was the highest in SME's history if we exclude the nearly \$1 million donation received in FY 2010.

Aggressive management of SME continues to look for opportunities, and a willingness to work with others has translated to a better financial position for SME.

Net assets for all entities of fiscal year 2013 exceeded \$24 million.

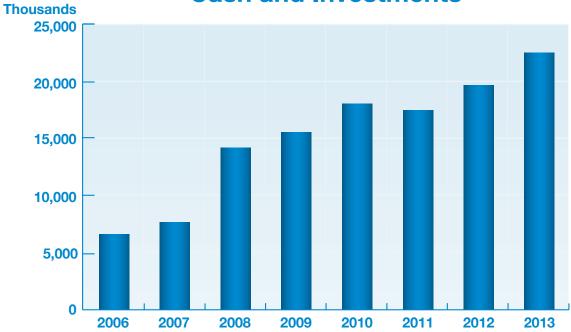




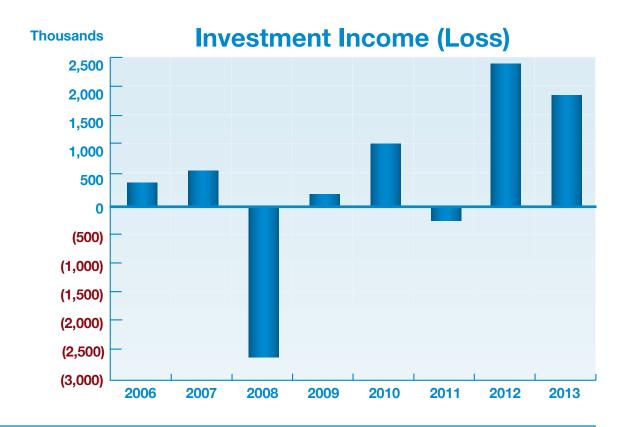


* Administration includes: Administration, accounting, customer service, IT, government affairs and web activities.





WAAIME merger with SME in 2008 included \$8.2 million in new investment dollars. Approximately \$13.4 million of investments are restricted for specific activities of the SME Foundation, SME division activities and WAAIME scholarsips.





AIME Awards

AIME Honorary Member Dr. Haydn Murray AIME President's Citation Dr. Michael Karmis Frank F. Aplan Award Dr. Michael J. Mankosa Hal William Hardinge Award Dr. William A. Miles Mineral Economics Award Dr. Graham A. Davis Mineral Industry Education Award Dr. Spencer Titley Erskine Ramsay Medal Dr. Christopher Mark Robert H. Richards Award John G. Mansanti William L. Saunders Gold Medal Timothy J. Haddon
SME Awards
SME Distinguished Member····· Joseph M. Driscoll
SME Distinguished Member·····Dr. Deepak Malhotra
SME Distinguished Member·····Rohini Sharma
SME Distinguished Member····· William A. Warfield
Robert M. Dreyer Award······Dr. Ihor A. Kunasz
Health and Safety Individual Excellence Award · · · · · · · · · · · H.L. Boling
Health and Safety Research
and Educational Excellence Award · · · · · · Hearing Loss Prevention Center at NIOSH Outstanding Student Chapter · · · · · · · · · · · · · · · University of Kentucky
President's Citation · · · · · · · · · · · · · Dr. Stanley T. Krukowski
President's Citation John N. Murphy
President's Citation · · · · · · · · · · · · · · Dr. Robert J. Pruett
President's Citation · · · · · · · · · · · · · · · · · · Robert V. Washnock
President's Citation for Local Section Service · · · · · · · · Andrea Martin
Ivan B. Rahn Education Award······Dr. Arden D. Davis
IVAIT B. Flaim Education Award
SME Foundation Awards
MEC Higher Education Campus Award · · · · · · University of Arizona
MEC Leadership Award · · · · · · · · · · · · · Julie Lucas
MEC Organization Recognition Award · · · · · · · · · · SME Minnesota Section
MEC Partnership Appreciation Award · · · · · · · · · Women in Mining Foundation
Syd S. Peng Ground Control in Mining Award · · · · · · · · · · İsmet Canbulat
Gyd 5. 1 Ging Ground Control in Willing Award 11 11 11 11 11 11 11 11 11 11 11 11 11

SME Division Award Recipients

Coal & Energy Division Awards

Coal & Energy Division Distinguished Service Award · · · · · · · Dr. Keith Heasley
Howard W. Eavenson Award · · · · · Jay F. Coline
Erskine Ramsay Medal · · · · · Dr. Christopher Mark
Percy Nicholls Award · · · · · Dr. Barbara J. Arnold
Stefanko Best Paper Award · · · · · · · · · · · · Jacob Carr and Joseph DuCarme
J.W. Woomer Young Engineer Award················· Heather Dougherty
Coal & Energy Division Past Chair Award · · · · · · · · · · Dr. Vladislav Kecojevic

Environmental Division Awards

Environmental Division Distinguished Service Award · · · · · · · · · Dr. Linda Figueroa
SME/AIME Environmental Conservation Distinguished Service Award · · · · · · · Jeffrey V. Parshley
Environmental Division Past Chair Award · · · · · · · · · · · · · · · · · · ·

Industrial Minerals & Aggregates Division Awards

Industrial Minerals & Aggregates A. Frank Alsobrook Distinguished Service Award · · · · · Iodd S. Harris
Hal Williams Hardinge Award · · · · · · William Miles
Industrial Minerals & Aggregates Division Young Scientist Award · · · · · · Dr. Hong-juan Sun
Robert W. Piekarz Award (Aggregates) · · · · · Joseph Carnahan
Robert W. Piekarz Award (Industrial Minerals) · · · · · · · · · Rajesh Raitani
Industrial Minerals & Aggregates Division Past Chair · · · · · · · Abani R. Samal

Mineral & Metallurgical Processing Division Awards

Antoine M. Gaudin Award · · · · · · Osvaldo Bascur
MPD Outstanding Young Engineer·····Tarun Bhambhani
Robert H. Richards Award · · · · · John G. Mansanti
Arthur F. Taggart Award · · · · · Pradip and Dr. Douglas W. Fuerstenau
Milton E. Wadsworth Award · · · · · · Dr. Gary A. Kordosky
Millman Poem (MPD Past Chair Award)····· Dr. Corby Anderson

Mining & Exploration Division Awards

Ben F. Dickerson Award · · · · · M. Stephen Enders
Mining & Exploration Division Distinguished Service Award · · · · · · · Dr. Madan M. Singh
Daniel C. Jackling Award · · · · · · Gary J. Goldberg
Mining & Exploration Division Outstanding Young Professional Award · · · · · · · Justin Anderson
Robert M. Peele Memorial Award · · · · · · · · · · Will Collingwood
M&E Division Program Area Managers · · · · · · · · Richard M. Diaz, Thomas L. Dyer, Shaun P. Graber
and Scott M. Shields
William L. Saunders Gold Medal · · · · · Timothy Haddon

SME

Division Scholarships

Coal & Energy Division Scholarship

Ashleigh J. Mitchell

New Mexico Institute of Mining and Technology

Ashley Nuhn

Missouri University of Science and Technology

Colton Chase Parsons

University of Kentucky

Crystal K. Darger

University of Utah

Darryl Smith

Southern Illinois University at Carbondale

Douglas K. Addo

University of Kentucky

Jack Maxey

Virginia Polytechnic Institute and State University

Julia Elizabeth Reichardt

West Virginia University

Melissa Anderson

Colorado School of Mines

Mindona Krzykowski

University of Alaska Fairbanks

Sharans Kabra

Indian School of Mines

Walter Price

Pennsylvania State University

John Sidney Marshall Memorial Scholarship (AIME/Coal & Energy Division)

Anthony Jamerson

Southern Illinois University at Carbondale

Aubrey Athey

Virginia Polytechnic Institute and State University

Carolyn Kosloski

Virginia Polytechnic Institute and State University

Chelsea Barrett

Virginia Polytechnic Institute and State University

Gautam Drolia

Indian School of Mines

Jake Colby Seiter

University of Utah

Jeffrey Stevens

West Virginia University

Nathan Ellgen

University of Utah

Rahul Deshmukh

Indian School of Mines

Richard Rowe

University of Utah

Sidharth Mahajan

Indian School of Mines

Sunny Soarabh

Indian School of Mines

Environmental Division Scholarship

Angela Rusconi

Virginia Polytechnic Institute and State University

Juliana Gil-Loaiza

University of Arizona

Noah Buikema

Michigan Technological University

Veolia Water Solutions and Technologies Scholarship (Environmental Division)

Carolyn Kosloski

Virginia Polytechnic Institute and State University

Gerald V. Henderson Memorial Scholarship (Industrial Minerals & Aggregates Division)

Ebrahim Karimi Tarshizi

University of Nevada-Reno

Richard Klimpel Memorial Scholarship (Mineral & Metallurgical Processing Division)

Jordan Rutledge

Colorado School of Mines

Mineral & Metallurgical Processing Division Scholarship

Caelen D. Anderson

Colorado School of Mines

Joseph Grogan

Colorado School of Mines

Juan Ma

Virginia Polytechnic Institute and State University

Manjunath Basavarajappa

University of Utah

Myriah Santistevan

South Dakota School of Mines and Technology

William Yin

Queens University

Mining & Exploration Division Scholarships

Chelsea Pomerov

Colorado School of Mines

Kathryne Sewester

Missouri University of Science and Technology

Russel Spaulding

University of Utah

Simon Ortega

University of Alaska Fairbanks



2013 **Division Scholarships**

Eugene Pfleider Memorial Scholarship (Mining & Exploration Division)

Ashlyn Hooten

University of Arizona

Steven C. Potter Scholarship (Mining & Exploration Division)

Douglas Conner

Colorado School of Mines

Henry DeWitt Smith Scholarship (AIME/Mining & Exploration Division)

Ebrahim Karimi Tarshizi *University of Nevada-Reno*

Stewart R. Wallace Memorial Scholarship

Jena Long

Colorado School of Mines

2013 SME Foundation Scholarship Recipients

J.H. Fletcher & Co. Scholarship

Ashley Hodgson *University of Utah*

Peter Mather University of Arizona **McIntosh Engineering Scholarship**

Aaron Larry

University of Utah

Ashlyn Hooten

University of Arizona

Jake Colby Seiter

University of Utah

MMSA/SMEF Presidential Scholarship

Colton Chase Parsons

University of Kentucky

Crystal K. Darger

University of Utah

Kathryne Sewester

Missouri University of Science and Technology

Syd S. and Felicia F. Peng Ground Control in Mining Scholarship

Behrooz Abbasi

Southern Illinois University at Carbondale

Christopher Newman

West Virginia University

Evan Keffeler

University of Nevada-Reno

Kevin Harris

University of Kentucky

Peng Zhang

West Virginia University







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