May Meeting - Thursday, May 18

Golden Hotel
800 Eleventh Street
Golden, CO 80401

Networking at 5:30 pm
Dinner at 6:00 pm
Speaker at 6:30 pm

Our Speaker for this month’s Section meeting will be Kirk H. McDaniel, P.E., Q.P., M.B.A. Kirk will be presenting on “Generation Safety Training.”

We now face a situation where we have an unprecedented number of generations (four) working in the mining industry at one time. Each has their own unique characteristics and attributes, and each learns and absorbs information differently. Hence, different methods and techniques must be developed that effectively addresses the need of each and all in order to achieve an effective training and safety culture.

We will also recognize the Colorado Section’s 25 and 50 year members, and hold officer elections for the 2017-2018 term.

SME Colorado Section Membership Renewal Reminder

If you have not done so already, please take this opportunity to sign-up for or renew your SME Colorado Section membership for the 2016-2017 year.

How to join or renew:

Online: Credit card payments can be made online by visiting our website and selecting the 2016-2017 SME Colorado Section Dues link under the Our Events heading.

http://community.smenet.org/colorado/events/

Mail: Check payments of $25 payable to SME Colorado Section mailed to Justin Anderson – SME Colorado Section Treasurer, 1400 16th St Suite 200, Denver, CO 80202-1471.

Monthly Meeting RSVP

Dinner Cost: $50 per person. Students welcome at $20 per person with reservation

RSVP and online payments can be made through the Colorado Section SME Community Events page:

http://community.smenet.org/colorado/events/

Select the event you would like to attend from the Colorado Section Events page and then select “Register Now”. You will be asked to log in if you have not already done so, using your SME national login credentials. There is also an option to register for a new account if you are a non-member of SME.

Credit card payments can be made online for an additional processing fee. If you plan to pay by check or cash, select the option to generate an invoice. This invoice will serve as your RSVP, with check or cash payment due at the meeting.

Please contact Brian Shaffer, bshaffer@usgs.gov, or Richard Schwering, rschwering@hardrock-consulting.com, with any questions regarding the meetings, or if you are interested in presenting.
Section Chair Report – Safety Share

Safety starts with looking out for yourself and for those around you. If you encounter a potentially unsafe situation, or if you find yourself in a situation where you or someone else has been injured, remember to SLAM; Stop, Look, Assess, Manage, or to put another way, “Make haste slowly.” This month’s safety share deals with pedestrian safety around forklifts and is based on information from Toyota Material Handling Ohio.

Chances are that you’ve encountered forklifts at least a few times. We see them in warehouses, home improvement stores, breweries and many other industrial workplaces, making these vehicles seem non-threatening to most people. If operated properly, they generally are quite safe to be around. What many fail to realize, however, is just how powerful, heavy and attention-demanding forklifts are. Accidents involving forklifts result in tens of thousands of accidents each year, and an average of 100 deaths per year.

When it comes to pedestrians walking in the same vicinity as operational forklifts, many accidents could be avoided if a few misconceptions were not held about the nature of forklifts. The following are five myths regarding forklifts held by pedestrians:

1. “Pedestrian safety around forklifts is a matter of common sense.” While using good judgment is helpful, it is not enough to prevent accidents. Distractions to drivers and walkers, equipment failures, complacency and other challenging conditions mean accidents can still happen. It is essential that pedestrians and operators remain vigilant when a forklift is operating.

2. “Forklift drivers can see me and will stop the vehicle.” We’ve all likely experienced stepping off a curb and onto a crosswalk with the expectation that any approaching cars will not hit us. If we have the right of way and are allowed to be where we are, we believe that we’re safe. With forklifts, however, it is never completely safe to assume an operator will stop before striking you. Operators may be distracted by the numerous gauges on the control panel, navigating tight pathways or responding to radio calls. Also, it can be difficult to see around loads at times, giving another reason to be hesitant before assuming the forklift will stop.

3. “Forklifts are capable of stopping before a collision happens.” Operators can be trained and competent, and equipment can be in perfect repair, but lift trucks can be very difficult to stop abruptly. The can weigh as much as a bus, with an empty weight of up to 9,000 lbs. and a weight in excess of 14,000 lbs. when fully loaded. If an operator does see a pedestrian, it is not a sure bet that the forklift can be halted in time to prevent a collision, as forklifts are designed to brake gradually, not suddenly. Even if the forklift is stopped in time, any load it carries can slide off and cause injury, damage, or worse, as well.

4. “Forklifts are properly maintained and will function predictably.” In some environments, forklifts are used practically 24 hours per day. While many take for granted that the equipment they rely upon daily will function properly, the continuous running of forklifts necessitates careful pre-operation inspections to ensure nothing is amiss. As busy as some users are, these inspections can unfortunately be overlooked or rushed at times. Also, when issues are found and forklifts are “removed from service” by having the keys removed by a supervisor, problems can still occur if another forklift key is used to start the machine—they’re universal.

5. “If I can’t see a forklift, I am not in any danger.” While collisions between forklifts and pedestrians are the cause of many injuries and deaths, they’re not the only way a pedestrian can be hurt. Forklifts operating in other aisles of a warehouse or large store, for instance, can bump shelves when turning or backing up, causing inventory or the shelves themselves to fall onto a pedestrian. Operators may misjudge distances when loading inventory onto a shelf, resulting in materials falling into another aisle. It may not seem like a frequent occurrence, but these things absolutely happen.

The bottom line when it comes to pedestrian safety around forklifts is that nothing should be taken for granted, no matter how long it has been since an accident occurred, how competent the driver is or how comfortable the pedestrian is in the environment. Experienced workmen and unfamiliar visitors alike are at risk if they fail to walk carefully and responsibly wherever forklifts operate. With a little training and warning, however, pedestrian-related accidents can be greatly minimized.
Section Chair Report

We will be holding our annual election of Colorado Section Officers at the May meeting. Our slate of proposed officers/directors for the 2017-2018 year is as follows:

- Section Chair – Jessica Spriet, Tetra Tech
- Vice Chair – Richard Schwering, Hard Rock Consulting
- Treasurer – Tem Tumurbat, Resource Capital Funds
- Secretary – Heather Lammers, Golder Associates
- Publicity Director – Kelly Donahue, Brown and Caldwell
- Program Chair – Brian Shaffer, USGS
- Director-at-large – Bruce Yoshioka, Colorado School of Mines
- Director-at-large – Jessie Liu-Ernsting, Resource Capital Funds
- Director-at-large – Greg Honig, Resource Capital Funds
- Past Chair – David Bieber

NOTE: for the position of Director-at-large, we will only select two of the three proposed directors.

We will also be honoring our 25- and 50-year members at the May meeting. If this is your 25th or 50th year of SME membership you should be receiving notification thereof.

Thank you for all that you do and I look forward to seeing you all at a meeting. If you have ideas, questions, comments, or criticisms about how the Section is running or regarding Section activities, please phone me at 720-245-6423, or email me at David.Bieber@martinmarietta.com. Thank you for entrusting me with the position of SME Colorado Section Chair.

Wishing you and yours a safe May.

Dave

Colorado MPD Convention

The Colorado MPD Convention is scheduled for May 4 – May 6 at the Broadmoor Hotel. We have a program of more than 20 speakers including Len Harris, Ken Brunk, Stan Dempsey Jr, Ronel Kappes, Mary Korpi, and 20 others who will paint a picture of today’s changing minerals industry. Please register soon at Coloradomdpd.com. Hotel rooms are going fast and sponsorship opportunities are still available.

Stranahan’s Colorado Whiskey Distillery Tour May 2017

The SME Colorado Section and the EMCD will be touring Stranahan’s Whiskey Distillery on May 19th. Tours will last approximately one hour and will begin on the hour from 1pm until 7pm. The cost is $10 per person, with a tasting opportunity included. Please RSVP with the number of people attending in your group and the time you plan to arrive to Tammy Sharp, Tammy.Sharp@tetratech.com. Space is filling up for the 6pm tour!
25 & 50 Year Members

The SME Colorado Section would like to recognize the following people for their long term commitment and continued involvement with SME and the Colorado Section.

25 Year Members
- Mark Alspaugh
- Corby Anderson
- Fred Banta
- Raul Borrastero
- Mathew Fein
- Alejandro Guerro
- John Gustavson
- Ed Picard
- Joel Schneyer
- Steven Shadow
- Ward Thurman

50 Year Members
- Richard Addison
- Robert Burnham
- Steven Davis
- Timothy Haddon
- James McGuigan
- Robert Phillips
- David Roberts
- Robert Scharp
- Albert Seep
- Charles Speltz

MEC Presents Special Awards to Students at the 2017 Colorado Science & Engineering Fair

On behalf of the SME Colorado Section, members of the Minerals Education Coalition were once again invited to act as Special Awards Judges for the 2017 Colorado Science & Engineering Fair, the top state science fair for Middle School and High School students. Members Dick Beach (Chair), Cathy Bagej, Paul Chamberlin, and Alan Cram traveled to Colorado State University, Fort Collins, on Thursday, April 6, to judge projects that showed excellence related to the mining and mineral industries.

Winning students were presented their awards on Friday evening, April 7 by local MEC member, Alan Cram. This year’s winners of SME Colorado Section Special Awards, and our recognition of their studies related to the mineral industry were:

- **Nathaniel Brim** - 8th Grader at Classical Academy, Colorado Springs. “Kinetics of Activated Carbon with Ion Exchange Resins, Poly Filter Pad, and Freshwater Bivalves in Aqueous Solutions Contaminated with Heavy Metals.” Mr. Brim was this year’s SME Honors winner in the Junior Division, and was awarded a plaque and $100.
- **Scott Prieve** - 8th Grader at North Middle School, Colorado Springs. “To Rip or to Rap: How Does the Design of Erosion Control on a Creek Bend Affect Bank Deterioration?” Mr. Prieve was this year’s High Honors winner in the Junior Division and was awarded a plaque and $200.
- **Mitchel Fosdick** - 12th Grader at Fowler High School, Fowler. “The Uptake of Copper Ions by Chlorella Vulgaris”. Mr. Fosdick was tied for this year’s Honors winner in the Senior Division and was awarded a plaque and $150.
- **Lacey Niccoli** - 10th Grader at Arickaree School, Anton. “Reclaimed! The Effects of Amendments on Soil Reclamation.” Ms. Niccoli was tied for this year’s Honors winner in the Senior Division and was awarded a plaque and $150.
- **Kyle Fridberg** - 11th Grader at Fairview High School, Boulder. “A Novel Method of Producing Colloidal Gold Nanoparticles from Gold Ore and Aqueous Sulfuric Acid.” Mr. Fridberg was this year’s High Honors winner in the Senior Division and was awarded a plaque and $400.

Each of the award winners received a framed certificate, SME backpack, mineral kit, SME Careers booklet, and MEC poster, plus a check. These students were also the recipients of many other awards at the fair. Congratulations!
Colorado School of Mines
SME Student Chapter Events

January – April 2017

This year, the Colorado School of Mines SME student chapter had the opportunity to attend the annual SME Conference and Expo right at home in Denver. From February 21st to 22nd, our students had the opportunity to network with both industry giants and other schools alike. The conference provided many great experiences, including project presentations on the newest developments in the mining world. More importantly, students managed to interact with mining professionals thereby gaining contacts in the industry and talk to potential future employers.

In March, the Minerals Education Coalition hosted events for boy scouts by providing them the opportunity to achieve both the Mining in Society and Geology Merit badge. The Mining in Society badge involved taking the boy scouts to the Phoenix Mine as well as the related mining museum. For the Geology Merit badge, students visited both the Colorado School of Mines’ geology museum as well as the school’s “Geology Trail.”

On April 15th students traveled to Martin Luther King, Jr. Early College to participate in the Women in STEM Day event. At the event, women of all ages come to participate in fun STEM-activities. Our chapter did it’s best to promote the importance of STEM, particularly in mining. We hosted and exciting cookie “mining” activity where girls were able to mine chocolate chip “ore” from cookies with the use of capital (fake money, toothpicks, and the cookies themselves). The activity taught the girls about the importance of economic considerations in mining as well as the need for the easiest method of ore extraction.

The chapter also hosted its annual mining competition during the school’s E-Days event. The competition drew the attention of students from many majors, as competitors challenged each other in hand steeling, jacklegging, gold panning, and mucking. In addition to the typical competition, our chapter was excited to host a rail-cutting competition on April 19th thanks to Jim Paschis. Many laughs were had as students raced against the clock and each other in the warm-hearted event.
Visit the SME Colorado Section web site: http://community.smenet.org/colorado/home

This Newsletter is emailed to current and active members of the SME Colorado Section. To view or modify your subscriptions, go to: http://community.smenet.org/colorado/sectiondirectory/profile/mysubscriptionsonprofile. You will be prompted to log in if you have not already done so, using your SME national login credentials.

You may also update your information with SME at: http://www.smenet.org
Come celebrate the publishing of a local author's first book *The Mineral Maniacs and the Magic Hardhat*. This book targets young readers (8-12 year olds), but is enjoyed by all ages.

We will be selling copies of the book at this event, and for each book sold we will give you a coupon for a pint of delicious Resolute beer. Food truck will be on site if you'd like to order dinner.

All are welcome at this launch party, though must be 21 or older to drink alcohol.

Please RSVP, so we can get an idea of head count in attendance.


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Free copies are available for educators. Learn more and subscribe at [www.TheMineralManiacs.com](http://www.TheMineralManiacs.com)