SME FOUNDATION

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Newsletter

Summer 2024

LETTER FROM THE PRESIDENT

Nearly halfway through 2024, I'm happy to report that the Foundation is having a very productive and successful year. We've been busily working on our outreach programs and continuing to expand our education initiatives; here are some updates: We were recently hosted by Newmont and Vulcan for Corporate Roundtable visits where we connected with our partners about the status of our programs and the value that they bring to the industry. As always, solicited feedback from them about where they see our greatest value and how we can make an even larger impact.

The MEC attended our second American School Counselor Association (ASCA) conference in mid-July in Kansas City, where the SME provided guidance counselors with information on careers in our industry.

Our new SMEF Golf Outing will be held at The Greenbrier in West Virginia on Friday, September 13. There's a limited number of golfers and sponsors left, so head over to the Foundation website and register.

If you haven't checked out our "Mined Minerals in My Day" activity book, I highly recommend sharing some with any youngsters that you know – it's a great companion for your summer vacation.

Thank you for your continued dedication to our mission and your contributions to our work in outreach and education. Your support, no matter the form it takes, makes a meaningful difference in our communities and for the greater good of our society.

Best,

Tom Rauch
SME Foundation President

SME Foundation Leadership

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MEC K-12 OUTREACH PILOT PROGRAM CONCLUDES IN DENVER, COLORADO

In 2022, the Mineral Education Coalition (MEC) launched the K-12 Outreach Pilot Program at two Denver Public Schools: Place Bridge Academy (K-8) and South High School (9-12), and later expanded the pilot to a third DPS School: Hallett Academy (1-5). This initiative was part of MEC's broader goal to establish a stronger presence in primary and secondary classrooms, aiming to spark students' interest in careers within the mineral industries while providing valuable educational resources to K-12 teachers. During the run of the pilot program, a total of 30 presentations and field trips were provided. Moving forward, the SME Colorado section will continue to deliver educational programs, with Richard Schwering leading that effort. MEC will now focus on piloting a program in collaboration with the SME Utah Section.

2ND QUARTER NATIONAL OUTREACH COLLABORATION (NOC) MEETING HELD JUNE 25, 2024.

Tyler Truman, past student president of the Bevlee Watford Society on Mining Outreach and Recruitment at Virginia Tech and Donna Arthur, Senior Student Recruitment Specialist from the Missouri University of Science and Technology, presented to an audience of 32 at the 2nd Quarter National Outreach Collaboration (NOC) virtual meeting. Truman shared strategies that have worked for him in conducting outreach education to K-12 students and their parents, teachers and counselors. Arthur shared her recruitment strategies and the value of working with the admissions department in her recruiting efforts. She also highlighted a 104% year-to-date increase in undergraduate applications for Mining Engineering, which indicates a growing interest in mining. The presentations included lots of great tips for outreach and will soon be available on the NOC Community page.

If you are interested in community outreach, we invite you to the 3rd Quarter NOC community outreach discussion to be held virtually in September 2024. Check the SME Community page for more information or contact Chris Earnest, NOC Chair, at **earnest@arizona.edu** or Akudo Nwokeukwu at **nwokeukwu@smenet.org**.

ABET ACTIVITY UPDATE

Submitted by C. Dale Elifrits

The SME ABET Visitor Selection Committee (VSC) and SME staff member Mona Vandervoort selected Program Evaluators for evaluation visits to eight degree programs this fall. Four visits will take place in the U.S. and will be conducted on their respective campuses. Four visits for foreign institutions will be completed virtually, but these decisions are not final yet. The SME program discipline distribution is two mining engineering, three geological engineering, one geophysical engineering and two new geology degree programs.

ABET staff is working to assign three new SME program evaluator candidates to campus visits as "observers". SME requires PEV candidates who have successfully completed ABET and SME training to join a campus visit team as observers in order to provide a "last step" experience in the PEV training process. This has been a less challenging exercise for this year's cycle with fewer degree programs to be evaluated. But, due to the small nature of our professional "fraternity" and the numerous conflicts of interest that this creates, SME continues to need new PEV candidates to be trained. In particular, we need to increase the number of PEVs who work in the industries where our programs' graduates work.

Please contact Mona Vandervoort if you are interested in learning more about the PEV Program.

NEW INFRASTRUCTURE AND CONSTRUCTION MATERIALS GUIDE ON MEC WEBSITE

The new *Infrastructure and Construction Materials Guide* is a web resource about nine commodities of the infrastructure and construction materials segment of the industrial minerals and related industries. The intended audience is the general public, such as teachers, university faculty and students, law and accounting firms, media and state/federal legislatures. Bill Wilson, a member of SME's Industrial Minerals and Aggregates Division, is senior editor and author of the Guide, with contributions from additional authors: Dr. Kadri Dagdelen, Richard Brown, Tom Newman, Roger Sharpe, Mike Blois and Jerry Gauntt.

The new *Infrastructure and Construction Materials Guide* can be accessed at **MineralsEducationCoalition.org/guide**.

SME CELEBRATES THREE PhD FELLOWSHIP AND CAREER DEVELOPMENT GRANT SUCCESSES

SME Congratulates Dr. Isabel F. Barton, Dr. Chris Roos and Dr. Aaron S. Young on successfully completing their SME grant programs.

Dr. Isabel F. Barton successfully completed the Career Development Grant Program that she started with SME in 2021. She was recently awarded tenure and is an associate professor of Mining & Geological Engineering at the University of Arizona. Her main focus is geometallurgy, which she defines as "addressing all the ways the mineralogy of an ore deposit will make it hard to get the metal out of it." She combines concepts and techniques from extractive metallurgy, mineralogy, mineral processing and economic geology to research new ways to characterize ore deposits and improve metal extraction methods.

Dr. Chris Roos recently completed his PhD with the completion of his dissertation titled Seeing, Thinking, Doing – A Multifaceted Model to Embrace Uncertainty in Mine Planning. Dr. Roos, one of the inaugural recipients of the PhD Fellowship in 2015, completed a unique program of study at the University of Montana and Montana Technological University under the Interdisciplinary Studies umbrella that included aspects of Mine Design and Optimization, Geostatistics, Applied Statistics and Data Analytics, and Technical Communication.

Dr. Aaron S. Young received his PhD in Mining Engineering from the University of Utah after receiving the 2018 Stantec/ McIntosh SME PhD Fellowship. Dr. Young's research focus was on the Digital Transformation of mining which involved creating a new approach to modeling mining assets and processes. As a result, he has developed disruptive skills in agile software development, project coordination, consulting for new/ small mining companies, entrepreneurship, mineral reconciliation, analytics and business intelligence.

$4K BY 40 CHALLENGE AND MATCH 2024

The 2024 $4Kby40 Challenge spring campaign was very successful with14 donors contributing a total of $5,345. A special thanks to Brooks & Nelson, LLC who generously matched the $4Kby40 donations, including a $250 match for members who signed up for the monthly recurring donation plan. **Brooks & Nelson LLC**, a woman-owned, global human resource management and recruiting consulting firm based in Golden, CO is a long-time supporter of SME and the SME Foundation.

$4Kby40 Challenge Award recipients include:

2023 – Drew Mason
2023 – Matthew Ulizio
2022 – Joshua A. Patterson
2021 – Matthew D. Furniss
2021 – Thomas C. Rauch
2019 – Peter and Jenessa Haarala
2018 – Ryan M. Murray

Brooks & Nelson
PROSPECTING FOR TALENT

We thank the $4Kby40 Challenge recurring donors who donate to the SME Foundation each month in order to make their goal. All donors under the age of 40 are encouraged to set-up a monthly, recurring gift based on how many months are left until they reach the age of 40.

Donors have the flexibility to choose the allocation of which SME Foundation program they wish to support. Donations made will be jointly eligible to this challenge, the $1K Club and the John T. Boyd Challenge. Please visit **www.smefoundation.org/4Kby40** and donate today!

SME PE COMMITTEE UPDATE

Submitted by Andy Schissler

The SME Committee is working on several projects. An article emphasizing the value of being a PE is being written for the December issue of *Mining Engineering*. In preparing the article, the committee is identifying specific value of licensure such as higher starting salaries and the PE as required credential. The committee has established a timeline to complete the *SME Study Guide, Edition 9* leading to availability for MINEXCHANGE 2025 in Denver. This summer will see final practice problems originated and reviewed for the 85-question practice exam. The committee is also planning PE events for MINEXCHANGE 2025.

The Mining Mineral Processing (MMP) results for the October 2024 MMP PE exam were: 43 total test takers with 34 first time and 9 repeat. The overall pass rate was 67%. This compares to a 34-year average of 57%. The October 2023 exam was the third year where the PE exam was offered on a computer at a Pearson VUE testing center. The only reference allowed for use during the exam is the *SME Mining Reference Handbook*. The SME Committee provides updates to the handbook. Updates completed this year included mine ventilation, rock mechanics, slurry design, storm water and mine equipment reliability.

The SME PE Committee now has 42 members. Committee members directly involved in exam development traveled to Greenville, SC at NCEES headquarters for their bi-annual meeting. They worked on question development and the 2024 MMP exam.

SME FOUNDATION

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To make a dontation to the SME Foundation, visit:

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THANK YOU!

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