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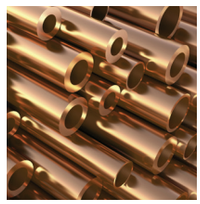
SME FOUNDATION NEWSLETTER



SME announces recipients of the 2017 Ph.D. Fellowship and Career Development Grants

The Society for Mining, Metallurgy & Exploration Inc. (SME) and the SME Foundation are pleased to announce the recipients of the 2017 Ph.D. Fellowship and the Academic Career Development Grants. The objective of the grant program is to help rebuild the mining school faculty pipeline which will provide the graduates that will become the leaders of the global mining and minerals industry.

Recipients of the 2017 mining academic grants are:

Freeport-McMoRan Career Development Grants
Shimin Liu, Assistant Professor of Mining Engineering, Penn State
Catherine Johnson, Assistant Professor of Mining Engineering, Missouri S&T

Shoemaker Ph.D. Fellowship Grant
Shane Lee, South Dakota School of Mines & Technology, Materials Engineering & Science

McIntosh Ph.D. Fellowship Grant
Heather Lammers, Colorado School of Mines, Mining Engineering, Mining and Earth Systems

Ph.D. Fellowship Grant funded by other sources
Danielle Rocha, Colorado School of Mines, Comminution & Grinding, Mining and Earth Systems

The 2018 grant application period runs December 1, 2017 through January 31, 2018. For more information on the SME mining academic grant programs, please visit http://www.smenet.org/students/grants-scholarships.

SME Foundation Executive Committee

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Letter from the President

Dear SME Members and Friends,

I am very pleased to report that SME's Ph.D. Fellowship and Career Development Grant program is having an important impact developing a new generation of tenured mining professors. Overwhelmingly this is the Foundation's most expensive fundraising commitment but is mission-critical for our profession and industry. We must be successful in fully funding the program to ensure success.

Mining programs are facing a staffing existential crisis because over the next five years, an estimated 56 professors will become retirement eligible. Retirement of this many professors poses a substantial negative program continuance risk because our mining departments are very small within the universities. An aggressive plan was developed by the Education Sustainability Committee to generously fund Ph.D. students planning academic careers, and at the same time generously providing support funding to university professors working toward achieving tenure.

Starting in 2015, three Ph.D. students and two professors working toward tenure are selected each year which we will support to a maximum of four and three years, respectively. The good news… Dr. Emily Sarver achieved tenure at Virginia University. Further, recently Aaron Noble transferred from Virginia University and accepted a professorship at Virginia Tech. Joshua Werner graduated with his University of Utah Ph.D. and accepted a professorship at University of Kentucky. Congratulations to Emily, Aaron and Joshua! Ten persons were selected the first two years of our program, three have successfully progressed. The remaining seven are working hard to gain their Ph.Ds. and tenure.

The overarching goal is to gain 10 tenured professors. There are strong signs already this program will be distinctly successful and the Foundation is very much dedicated to fully funding this important effort. This 'moving the needle' plan will significantly help sustain our r emaining U.S. mining programs. But the program is expensive at a cost of $1.324 million per year during the peak program years. This will require substantial donor dedication and support.

The Foundation is very fortunate to have and is very grateful for our dedicated financial supporters, both mining companies and individuals. As this program continues to grow over the next two years to a full complement of 12 Ph.D. candidates and six professors attempting to obtain tenure, we are asking for your financial support. If you are already donating, we thank you and at the same time are asking if you might be able to do a little more. This is very important.

Best regards,
Bill Hancock

To donate to the SME Foundation, please visit us at www.smefoundation.org

2017 BSA Jamboree

The Boy Scouts of America (BSA) National Jamboree is almost here. The BSA Jamboree will be held at the Summit Bechtel Family National Scouting Reserve in Glen Jean, WV during July 19-28, 2017. Of the selective 37 merit badges being offered, SME is honored to have been asked by BSA to coordinate the Mining in Society merit badge booth and program, and we are excited to showcase this badge at the National Jamboree since its release in 2014.

Scouts have two opportunities to earn patches by completing selected activities from badge requirements. These address equipment, safety, careers and mineral uses. Additionally, scouts can visit the Sustainability Tree House, go on the Order of the Arrow Garden Ground Mountain hike or complete any remaining requirements.

We would like to thank the following for their support:

Eagle – $5,000 and greater
Alpha Natural Resources, Contura Energy, Coronado Coal LLC, Murray Energy Corporation, Natural Resource Partners, Young Leaders of SME

Life - $3,000
GE Mining, New Enterprise Stone & Lime Co.

Star - $1500 - $2,000
ArrMaz, Minnesota Minerals Resource Education Foundation, SME Pennsylvania Section, SME Wyoming Section

First Class - $500
Fenner Dunlop Americas, Gold Leaf Placer LLC., King's Tire Service, Precision Pulley and Idler, Thomas Rauch

Scout – Donations, materials or services for the betterment of the program offering.
Buffalo Wire Works, Coal-Mac LLC, Costco, Flexco, McLanahan Corporation, Minerals Education Coalition, Owen-Ames-Kimball Co., Ronald Lewis, ShawAlmex, Thayman Rubber, US Department of Labor Mine Safety and Health Administration (MSHA), US Department of the Interior Office of Surface Mining Reclamation and Enforcement (OSMRE).

We would like to also recognize the following individuals who have volunteered to work the Mining in Society merit badge booth:
Adam McCalister, Allen Cooper, Bob Cline, Brian Hess, Charlie Zimmerman, Chris Butler, Chris Looney, Corey Barbour, Dan Alexander, Dan O'Connor, David Scriven, Edward Wellman, Eric Lilly, Fred Mills, Gary Linley, Greg Riggs, Harley Smith, Jason Bragg, Jay Perry, Jim Campbell, Joe Wickline, Joseph Hirschi, Karen Rose, Katie Allison, Leslie Lavender, Louis Irwin, Michael Maxson, Mike Fletcher, Miranda Thomas, Pam Wilkinson, Richard Katz, Steve Richards, Tiff Hilton, Tom Barnum, Trent Carney, Wes Fortner, Will Wallace and Will Wilkinson.

Steve Gardner, Karen Rose, Karen Jass, Charlie Zimmerman, Dan Alexander, David Scriven and Frank McAllister have been key in helping define and develop the merit badge requirements program for the National Jamboree. Thank you to the SME and MEC staff who have worked behind the scenes and the many individuals whom have helped recruit both donations and volunteers, and those who contributed through the CrowdRise donation page.

A special thank you goes out to Jason Bragg and Coronado Coal for helping coordinate and deliver incoming materials, recruiting volunteers and for donating the 12-ft mining tire that is displayed in front of the Mining in Society merit badge booth.

Ginger L. Hustrulid
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Upcoming Events:

BSA Jamboree
July 19-28, 2017
Glen Jean, WV

PE Review Course
September 16-20, 2017
St. Louis, MO

30th Annual National Mining Hall of Fame Induction Banquet
September 23, 2017 | Denver, CO

Review Course for the Professional Engineer (P.E.) Examination of Mining/Mineral Processing Engineers

NCEES advancing licensure for engineers and surveyors

The Professional Engineer (PE) License is the gold standard for professional competency. In the industry, PEs are considered among the most qualified and capable mining professionals supporting operations worldwide. As the industry expands and currently faces lower prices for minerals, companies see a greater need for professional quality.

Of the SME membership, roughly 2,000 members are licensed Professional Engineers. SME and its Foundation support a Committee composed of Licensed Professional Engineers who write questions and perform exam development. The SME PE Committee has grown in one year from 51 to 67 members. Much of the interest grew from the 15 PEs who took the actual exam delivered October 2016 to determine the passing score for the next seven years. Seven of the new members joined nine veteran PE Committee members at the Clemson meeting June 23-24, 2017.

The PE Committee continues to compile a PE examination for Mining/Mineral Processing that continues to perform excellently. The PE Committee had its regular annual workshop in Denver on the Saturday and Sunday prior to the 2017 SME Annual Conference & Expo. The Committee pre-tested the October 2017 exam, wrote and reviewed questions, and conducted many other items of business. There were 40 Committee members in attendance.

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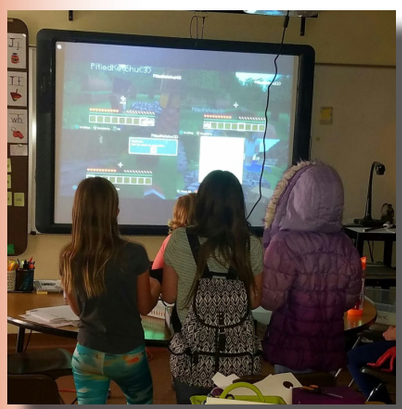


Wingate Elementary students play a more realistic version of Minecraft

Move Mining Update

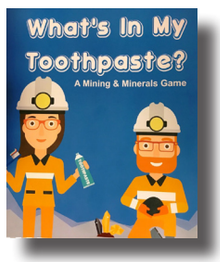
Nicole Cole and Tanya Kriss attended a competition in Grand Junction to support Team Atwood's winning idea with Minecraft. After-school students at Wingate Elementary played a version of Minecraft that simulates a more realistic and competitive mining experience. The Atwoods adapted the game for this event, incorporating a variety of energy sources and modern mining equipment. The scoring system was affected by amount and value of ores mined, the extent to which they were processed and the requirement for land reclamation.

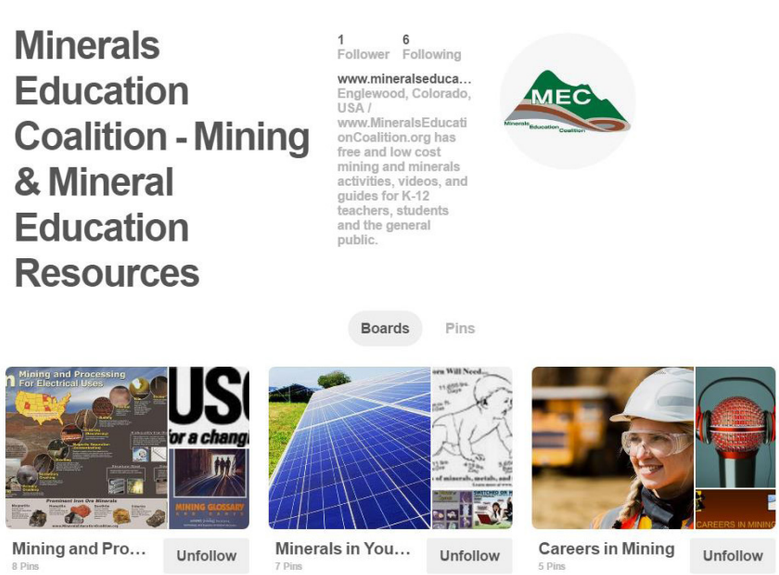
Team Miles of Smiles celebrated the launch of their first book--The Mineral Maniacs--on May 22, 2017. The concept for the novel, which is planned to be the first of a series, was presented in the live competition at the SME 2017 Annual Conference & Expo. It also caught the attention of Climax Molybdenum Company and The Electrum Group for sponsorship. The book can be purchased from the SME Store at www.smenet.org. There are plans to translate the book into Spanish due to requests from SME members in Spanish-speaking countries.

Earth Science Week Update

14,000 copies of the new "What's In My Toothpaste" game have been shipped to become part of the American Geoscience Institute's Earth Science Week Toolkit, which will also include the new calendar with the "A Paste With A Taste" activity adapted with permission from Women in Mining.

Coming this fall – Teacher Game Kits in the MEC store at **www.mineralseducationcoalition.org**





New MEC Pinterest Page

MEC continues to pursue new ways to get the word out about our resources. MEC now has a Pinterest page at:

www.pinterest.com/mineralseducationcoalition

According to Omnicore, five percent of all referral traffic to websites comes from Pinterest. Also, in our survey of teachers that visited MEC's booths at the 2016 regional NSTA conferences, 30% of 259 teachers that responded to the question indicated that they use Pinterest in their teaching, curriculum or planning--a greater percentage than use Twitter or Facebook.

The new page is the next step in gaining greater exposure to teachers, students and the general public for MEC's materials and resources.

Check us out on Pinterest and become a follower!

SME FOUNDATION™

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Thank You!

The SME Foundation thanks our Corporate Roundtable Partners for their encouragement, support and assistance in creating a stronger industry around the world, developing tomorrow's professionals and leaders, and strengthening relationships within our communities. To find out more or to lend your support, please visit the Foundation website at www.smefoundation.org.

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

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