Dear Mines and Metallurgy Academy Members,

Thanks to all of you that attended our April 2012 meeting. Highlights were the recognition of our seven 2012 Academy Scholars, induction of four new Academy members, and recognition of two of our outstanding professors. Our newest Academy members are Dr. Dennis Croessmann, Senior Manager at Sandia National Laboratories; Dr. Phillip Ferguson, Instrument and Source Design Division Director at Oak Ridge National Laboratory; Ricky Martin, Enterprise Manager for Metallic Materials and Processes at Boeing; and Philip McPherson, Senior Vice President, Technology at Saint-Gobain Containers, Inc.

In 2010, our Academy began to formally recognize two of our outstanding faculty members with a $1000 award. Nominations are submitted by the seven academic programs represented by our Academy. Recognized last April were Dr. Bill Fahrenholtz, Professor of Ceramic Engineering and Dr. Runar Nygaard, Assistant Professor of Petroleum Engineering.

Seven seniors were also recognized as Academy Scholars for 2012. They each received a $500 cash award and an engraved watch. These are special awards that are given to students who are judged by their peers as graduates with the highest potential to excel in their professional careers. Those receiving awards at our last meeting were Catherine Mohrmann (Ceramic Engineering), Scott Pisarik (Metallurgical Engineering), Nevan Himmelberg (Petroleum Engineering), Grace Harper (Geological Engineering), Michael Allen (Mining Engineering), Krista Rybacki (Geology and Geophysics), and Gregg Crannick (Nuclear Engineering).

Many of you know that we lost one of our most active members last month. Jerry Bersett served as one of the first officers of our Academy, as vice chairman in 1999 and then as our chairman until September 2001. He again served as our vice chairman from 2004 to 2007. Jerry was a leader on our Strategic Planning Committee and hosted our most recent Strategic Planning Committee meeting last April in St. Louis. A funeral mass was held for Jerry on August 15, 2012. He will be missed.

Our next meeting will be held on October 12, 2012 before the Missouri S&T Homecoming weekend. The meeting agenda is included with this newsletter. Please note that the location of our meeting is the Southwestern Bell Cultural Center, 1207 North Elm Street. If you are able to arrive on Thursday, please plan to attend the fourth annual Dr. Thomas J. O’Keefe Lecture. This year’s presentation will be given by Dr. Scott D. Morrison, Chief Executive Officer of Metalor Technologies. Dr. Morrison received a PhD in Metallurgical Engineering from Missouri S&T in 1999 and a Professional Engineering degree from Missouri S&T in 1999. The lecture will begin at 3:30 on October 11th in room 204 of McNutt Hall. Hope to see you on October 12th!

Keith Wedge, Chair
Mines and Metallurgy Academy
September 2012

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**Chair’s Corner**

The LWRs will be based on the Westinghouse’s 225-MW small modular reactor design above. Missouri’s Governor Jay Nixon visits S&T’s Nuclear Reactor in June 2012 to examine the research potential of S&T in nuclear power engineering to aid Missouri’s push for this initiative.

**CHANCELLOR SCHRADER OPENS A NEW CORRIDOR FOR MINING ENGINEERING RESEARCH AND EDUCATION**

The new $700K Surface Mining Virtual Simulator was unveiled in April 2012. This facility will be used for research and education in surface mining engineering and to educate the next generation of K-12 students on innovations in mining engineering.

**MISSOURI S&T WINS THE $24 M SAUDI SMP PROJECT**

Missouri S&T wins the $24 M International bid for establishing the Saudi Mining Institute. This institute will educate and train professionals for the emerging mining industry of Saudi Arabia.

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<th><strong>MINE M DEPARTMENT NEWS</strong></th>
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<tr>
<td>Light Water Reactors (LWR) Energize Nuclear Power Research at Missouri S&amp;T</td>
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**NEW FACULTY**

Dr. Lana Z. Atalha, Assistant Professor; PhD UT-Dallas

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**2012-13 MNE STATISTICS**

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<th>Statistic</th>
<th>Value</th>
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<tr>
<td>Enrollees 439.273 Seniors, Juniors, and Sophomores; 82 Freshmen, 94 ME/EE 44 PhD</td>
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<td>$360K in endowed, industry &amp; competitive scholarships</td>
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<td>MNE Graduated 71 MinE and 32 NucE students, Largest in a decade</td>
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<td>100% Placement for 2011 Graduates with $75K starting salary</td>
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<td>Overall, &gt;90% of students involved in Department, Campus and External Extracurricular Activities</td>
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**MAJOR MINE DEPARTMENT NEWS**

- **$24 M funding for the Training and Education of Saudi Mining Professionals**
- **$650K funding by CDC, NICSH, Caterpillar, and Peabody on Dump Truck Vibrations Research**
- **$3.9 M funding USDOT, US, NRC, DARPA, and Exelon for Nuclear Eng Research**
- **$4 M funding for Capacity Renewal in Mining Eng**
Materials Science and Engineering

222 McNutt Hall
Rolla, MO 65409-0340
Phone: 573-341-4801
Web: www.mse.missouri.edu

Students
- 184 total undergrad students
  → 85 MetE / 99 CerE
- 57 graduate students
  → 19 MetE / 10 CerE / 37 MSE
- 5342K in endowed scholarships given out in AY12-13; $125K in competitive scholarships from professional organizations
- >95% placement rate in Dec 2011 & May 2012; starting salaries Met: $60,437 Cer: $58,786

Faculty
- Two New Faculty Join MSE
  - Mohsen Asla Zaeem
    Ph.D. in Mechanical Eng. from Washington State University (2010)
    Computational Materials Science
  - Michael Moats
    B.S. (‘92) and M.S. (‘95) in MetE, UMR
    Ph.D. (‘89) in MSE, University of Arizona
    Mines & Metallurgy Academy Member
    Extractive metallurgy

Alumni
- G. Robert Couch, MSM, ChemE 1941
- Former President of AMAX Specialty Metals Corporation. A close friend and research sponsor of Professor Tom O’Keefe
- $2,768M endowment
- Purpose: To bring new expertise, energy, and leadership to the study of Materials Science and Engineering at Missouri S&T.

Geological Sciences and Engineering

129 McNutt Hall
Rolla, MO 65409-0410
Phone: 573-341-4816
Web: www.gse.missouri.edu

Students
- FALL 2012: GSE Growth Continues
  - 640 Total GSE Students
  - 391 Undergrad Students (includes FEP)
    98 Geophysics / 210 Petroleum
  - 156 Graduate Students on campus
    52 Geophysics / 68 Petroleum
  - 93 ft Wood/Distance GE Grad Students

Faculty
- New GSE Faculty Member
  - Dr. Mingzhong Wei
  New Ass Prof in Petroleum Engineering. PhD New Mexico Tech, Reservoir simulation, natural gas, digital oil field.

GSE Faculty News
- GSE Faculty News
- Dr. Curt Elmore
  Promoted to Professor of Geological Engineering. He is a highly prolific faculty member working in many areas, such as: Alternative energy, clean water for developing countries, environmental remediation.

Malaysia Student Exchange Program
- Petroleum Engineering students Shane Myers, Rachel Kautz, and Michael O’Keefe spent the Spring 2012 semester in Malaysia at the Petroleum University.

Scott Morrison
CEO Metalar Technologies SA
MetE Ph.D. ’96
October 11th, 2012

SPE Symposium News: April 2012
- R. Ford with Len Koeberl, Steve Sullivan, Cory Oll and Tim Bradley (Kinser Morgan).