

2012-13 MNE STATISTICS

- ❑ Enrollment at **493**; **273** Seniors, Juniors, and Sophomores; **82** Freshmen; **94** ME/MS and **44** PHD
- ❑ **\$380K** in endowed, industry & competitive scholarships
- ❑ MNE graduated **71** MinE and **32** NucE students, the Largest in a decade
- ❑ **100%** placement for 2011 grads with **\$73K** starting salary
- ❑ Overall, **> 90%** of students involved in Department, Campus and External Extracurricular Activities

MAJOR FUNDING

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

NEW FACULTY

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

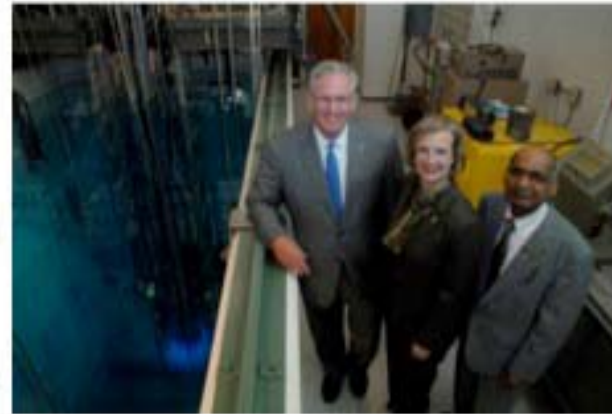
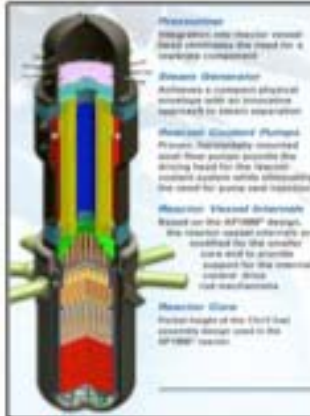


Research Areas: Oil Sands Ore Processing, Clays, Tailings Management,

Polymer Science, Nanotechnology, Interfacial Science, and Colloidal Interactions in Aqueous Systems

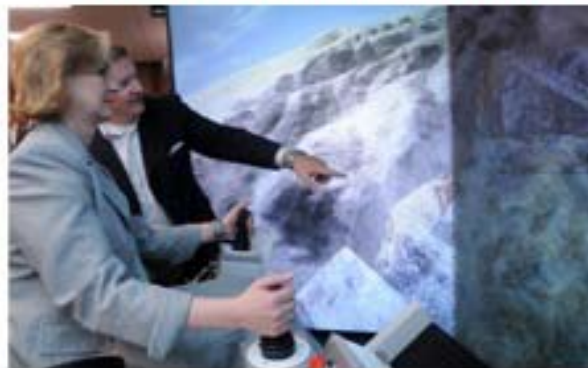
MAJOR MNE DEPARTMENT NEWS

LIGHT WATER REACTORS (LWR) ENERGIZE NUCLEAR POWER RESEARCH AT MISSOURI S&T



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

September 2012

m & m academy newsletter

Chair's Corner

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 1985 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



**Mines and Metallurgy Academy Business Meeting
October 12, 2012
Southwestern Bell Cultural Center**

- 8:30 AM Continental Breakfast
- 9:00 AM Opening Remarks & Introductions
- 9:15 AM Approval of April 2012 Minutes
- 9:20 AM Committee Reports
- 9:45 AM Break
- 10:00 AM University Advancement Report
- 10:30 AM Department Reports
- 12:00 PM Working Lunch
Old Business
New Business
- 1:30 PM Open Discussion, Wrap-Up and Optional Tour of Departments

- ✦ 184 total undergrad students
→ 85 MetE / 99 CerE
- ✦ 57 graduate students
→ 10 Met / 10 Cer / 37 MSE
- ✦ ≈ \$342K 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



- ✦ Professor Bill Fahrenholtz named Curators' Professor – will be bestowed on him at the December 2012 Commencement

Two New Faculty Join MSE



- ✦ **Mohsen Asle 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. ('98) in MSE, University of Arizona
- ✦ Mines & Metallurgy Academy Member
- ✦ Extractive metallurgy

Thomas J. O'Keefe Lecture

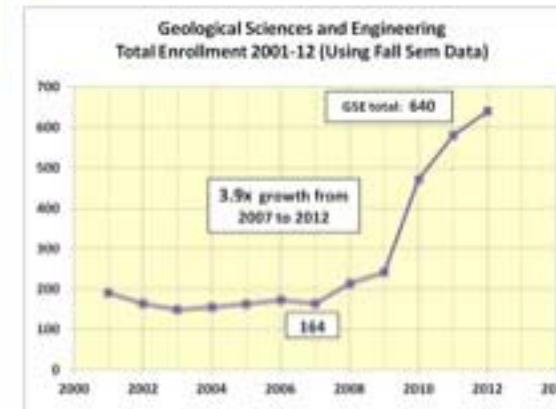


- ✦ **Scott Morrison**
- ✦ CEO Metalor Technologies SA
- ✦ MetE Ph.D. '85
- ✦ October 11th, 2012

Roberta and G. Robert Couch Assistant Professors of Materials Science & Engineering Endowment

- ✦ 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.

- FALL 2012: GSE Growth Continues**
- ✦ 640 Total GSE Students
 - ✦ 391 Undergrad Students (includes FEP)
98 G&G / 99 GE / 194 Petroleum
 - ✦ 156 Graduate Students (on campus)
52 G&G / 36 GE / 68 Petroleum
 - ✦ 93 Ft Wood/ Distance GE Grad Students



GSE Defining Distinctives

- ✦ Only Science + Engineering Dept at S&T
- ✦ Fastest Growing Dept at S&T
- ✦ 4th Largest Eng Dept (MAE, ECE, Civ, GSE)
- ✦ Largest SCH/Faculty member of Eng Depts
- ✦ Attracts students from 20+ countries
- ✦ 5th Highest Research Expenditures in FY11
- ✦ Need more faculty, space, resources.

GSE Strategic Planning: Please Help!
GSE faculty are continuing a strategic planning effort called "Vision 2020." We are developing:

- ✦ **Our Core Identity:**
Mission Statement, Core Values, History
- ✦ **Understanding Who We Are, Our Present, and Anticipating our Future Conditions:**
SWOT Analysis, Competitive Strengths
- ✦ **Our Future Direction**
Vision Statement, Audacious Goals
- ✦ **How Will We Get There?**
Strategies, Action Items, Resources Needed

As we develop these, we would like key GSE alumni to join us and give input as to what world class programs in Geology/ Geophysics, Petroleum and Geological Engineering should be, and your views on what our niche is.

New GSE Faculty Member

Dr. Mingzhen Wei

New Asst Prof in Petroleum Engineering. PhD New Mexico Tech, Reservoir simulation, natural gas, digital oil field.



GSE Faculty News

Dr. Curt Elmore

Promoted to Professor of Geological Engineering. He is a highly productive 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, (shown) and Michael Ortman spent the Spring 12 semester in Malaysia at the Petronas Tech University.



SPE Symposium News: April 2012
R. Flori with Len Koederitz, Steve Sullentrop (Hunt Oil), and Tim Bradley (Kinder Morgan).

Outstanding GSE Research

- ✦ \$1.6 Million GSE Dept FY 2012 Research Expenditures
- ✦ \$2.12 Million GSE Dept FY 2012 New Research Awards