

- ♣ **218** total undergrad students
→ 125 MetE / 93 CerE
- ♣ **52** graduate students
→ 10 Met / 10 Cer / 32MSE
- ♣ ≈ \$342K in endowed scholarships given out in AY12-13; ≈ \$125K in competitive scholarships from professional organizations



- ♣ Starting salaries
Met: \$60,437
Cer: \$58,736



Professor Bill Fahrenholtz named Curators' Professor at December Commencement



New Faculty member in MSE



Caizhi Zhou

- ◆ Ph.D. in MSE from Iowa State University (2010)
- ◆ Computational Materials Science

Keramos & Material Advantage Groups win National Awards at MS&T 2012 in Pittsburgh



March 2013

m & m academy newsletter

Chair's Corner



Dear Mines and Metallurgy Academy Members,

Greetings from your Academy! It is once again time for our annual Spring meeting, banquet, and induction ceremony. This year's events will be held on Thursday, April 18, 2013. You will see the highlights of our business meeting on the attached agenda. There will also be a luncheon planned for spouses attending. This year we will be honored to have Chancellor Cheryl Schrader attending our evening banquet.

We will be inducting seven new members into our Academy. They are Tim Bradley, Petroleum Engineering '77; Larry Britt, Geological Engineering, '79; Erik Erbe, Ceramic Engineering '87, '88, and '91; Ken Gielow, Metallurgical Engineering, '70 and '71; Harvey Goodman, Geological Engineering, '77 and '87; Dan Scott, Metallurgical Engineering, '70; and Tom Wetteroth, Ceramic Engineering, '79 and '82. We will also be recognizing two faculty members for their excellence in teaching and research. This year's faculty honorees are Dr. Arvind S. Kumar, Associate Chair and Professor, Department of Mining and Nuclear Engineering, and Dr. Kwame Awuah-Offei, Assistant Professor, Department of Mining and Nuclear Engineering.

We will also again be honoring seven students representing each of our seven departmental programs that have been selected as this year's Academy Scholars. These outstanding students were selected from the 21 that were nominated as graduating seniors with the highest potential to excel in their professional careers.

You will see in the attached reports some of the great accomplishments made by our three departments. Each department chair will be making a presentation during our business meeting.

Hope to see you on April 18th.

Keith Wedge, Chair
Mines and Metallurgy Academy
March 2013

Mines and Metallurgy Academy Business Meeting
Missouri /Ozark Room
Havener Center
April 18, 2013

9:00 AM	Opening Remarks/Introductions
9:40 AM	Approval of Minutes/Committee Reports
10:00 AM	Development Report
10:30 AM	Break
10:45 AM	Departmental Reports
11:30 AM	Lunch with Student Scholars
1:15 PM	Faculty Award Recipients Introduction and Presentations
6:00 PM	Reception (McNutt Hall)
7:00 PM	Dinner, Scholars Awards, Faculty Recognition, and New Member Induction



Mining and Nuclear Engineering

226 McNutt Hall, Rolla, MO 65409-0450, Phone: 573-341-4753; Web: <http://mne.mst.edu>

2012-13 MNE STATISTICS

- Enrollment at **506; 285** Seniors, Juniors, and Sophomores; **77** Freshmen; **99** ME/MS and **46** PHD
- \$420K** in endowed, industry & competitive scholarships
- MNE graduated **71** MinE and **32** NucE students, the Largest in a decade
- 100%** placement for 2012 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. Nassib S. Aouad, Assistant Professor; PhD UMR



Research Areas: Mechanical Design and Automation; Machine Health and Fatigue Analysis; Virtual Prototyping;

Machinery/Whole Body Vibrations; Computational Fluid Dynamics Numerical Modeling and Simulation

MAJOR MNE DEPARTMENT NEWS

2012 OUTSTANDING TEACHING AWARDS



Dr. Gary E. Mueller



Dr. Jason Baird



Dr. Kwame Awuah-Offei



Dr. Hyoung K. Lee

2012 OUTSTANDING RESEARCH AWARD



Dr. Stewart Gillies

DIRECTOR OF RMERC



Jimmie Taylor serves 20 Yrs at S&T



2012 Mine Rescue Champions



2012 Nuclear Summer Camp



2012 Explosives Camp Fireworks

2012 American Nuclear Society Student Chapter Meeting at Missouri S&T



Geological Sciences and Engineering

Geology, Geophysics, Geological and Petroleum Engineering

129 McNutt Hall
Rolla, MO 65409-0410
Phone: 573-341-4616
Web: www.gse.mst.edu

Students

SPRING 2013: GSE Growth Continues

- 656 Total GSE Students**
- 401 Undergrad Students** (includes FEP)
97 G&G / 100 GE / 204 Petroleum
- 153 Graduate Students (on campus)**
52 G&G / 36 GE / 65 Petroleum
- 102 Ft Wood/Distance GE Grad Students**

GSE: Fastest Growing Dept at S&T

From Fall 2010 to Spring 2013:

Gaining students:

- GSE grew **+128 students (40%)**
- MNE grew **+67 students (26%)**
- ECE (+62), BioSci (+36), Chem E (+30)

Same size: MSE, MAE, others

Losing students:

- EMan (-12), BusIST (-54), CArE (-172)

GSE Defining Distinctives

- Only Science + Engineering 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
- Largest S&T department w/o own building.
- 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.

Vision 2020

Faculty, Building Needs

Geology at S&T: 103 years ago...

Vachel H. McNutt was the first known Geology graduate, in 1910. He then served as an instructor in the Geology department, earning an MS in 1912.

Petroleum Engineering at S&T: 92 years...

Petroleum Engineering began 92 years ago, as an option for the Mining degree, in 1921. It became a stand-alone degree in 1966.

GSE needs a new building...

GSE is desperately short of lab and research space, offices, and other essential space.

The bar is being raised. Other competing Geoscience and Petroleum programs are moving into new buildings:

Texas Tech: \$20 million project will house 40,000 square feet. Many new labs.

Colorado School of Mines Marquez Hall: 64,000 square feet. High finish quality.

Univ. of Tulsa Stephenson Hall: 38,000 square feet.

Geosciences and Petroleum have a rich tradition at S&T.

We produce quality graduates. **Please help us** to attract the private, corporate and state funds to build a top quality, world-class building with labs, research, computing, teaching and student space.

Malaysia Exchange Program

Petroleum Engineering student Landon Kelsey is in Malaysia in Spring 2013.



SPE Energy Symposium: April 15, 2013

Mark your calendars and plan to attend the Third Annual Energy Symposium, organized and sponsored by the SPE student chapter. This one-day event features presentations by industry speakers, plus the annual Petroleum Engineering Banquet that evening (Mon, April 15).

Outstanding GSE Research

\$1.6 Million
GSE Dept
FY 2012 Research
Expenditures

\$2.12 Million
GSE Dept
FY 2012 New
Research Awards