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
2012-13 MNE STATISTICS

- Enrollment at 506; 285 Seniors, Juniors, and Sophomores; 77 Freshmen; 99 MEMS 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
- $850K 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;
- Machinry/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

2012 OUTSTANDING RESEARCH AWARD

Dr. Hyoung K. Lee
Dr. Stewart Gillies

Jimmie Taylor serves 20 Yrs at S&T 2012 Mine Rescue Champions

2012 Nuclear Summer Camp
2012 Explosives Camp Fireworks

2012 American Nuclear Society Chapter Meeting at Missouri S&T

SPRING 2013: GSE Growth Continues

- 656 Total GSE Students
- 401 Undergrad Students (includes FEP)
  - 97 GSE / 100 GE / 204 Petroleum
- 153 Graduate Students (on campus)
  - 52 GSE / 36 GE / 85 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 (20%)
  - ECE (+62), BioSci (+36), Chem E (+30)

- Losing students:
  - EMAn (-12), BusIST (-54), CARe (-172)

Same size: MSE, MAE, others

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
- 4th Highest Research Expendits 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

- Students
- Faculty, Building Needs
- Geology at S&T: 103 years ago...
- Petroleum Engineering at S&T: 92 years...

GSE: Fastest Growing Dept at S&T

- Fastest growing at S&T
- Largest S&T department w/o own building
- Attracts students from 20+ countries
- Only Science + Engineering Dept at S&T

Please help us build a top quality, world-class building with labs, research, computing, teaching and student space.

We produce quality graduates. Please help us 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

Geological Sciences and Engineering

Geology, Geophysics, Geological and Petroleum Engineering

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

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

Pipestone to distance GE grad students

GEOL & G&G / 100 GE  /  204 Petroleum

FY 2012 Research Expenditures

- $2.12 Million
- $1.6 Million
- $0.5 Million
- $0.3 Million
- $0.2 Million
- $0.1 Million
- $0.0 Million

FY 2012 New Research Awards

- $2.12 Million GSE Dept FY 2012 New Research Awards
- $1.6 Million GSE Dept FY 2012 Research Expenditures
- $0.5 Million
- $0.3 Million
- $0.2 Million
- $0.1 Million
- $0.0 Million