FALL 2011: GSE Growth Continues

- **566 Total GSE Students**
- **329 Undergrad Students** (includes FEP)
- **82 G&G / 90 GE / 157 Petroleum**
- **145 Graduate Students (on campus)**
- **41 G&G / 33 GE / 71 Petroleum**
- **92 Ft Wood/ Distance GE Grad Students**

GSE Strategic Planning: Please Help!

GSE faculty are beginning a year-long strategic planning effort called “Vision 2020.” To lay a strong foundation for and to guide our future, we are developing the following:

**Our Core Identity:**
- Mission Statement, Core Values, History
- Understanding Who We Are, Our Present, and Anticipating our Future Conditions:
  - SWOT Analysis, de Bono’s “Six Hats,”
  - Competition, Constraints, and Competitive Advantage

**Our Future Direction:**
- Vision Statement
- BHAG: “Big HAIRy Audacious Goal”

**How Will We Get There?**
- Strategy(ies); Strategic Objectives that lead to SMART Goals; Action Items

As we develop these, we would like key GSE alumni to join us in the planning effort called “Vision 2020.” To lay a strong foundation for and to guide our future, we are developing the following:

**New GSE Faculty Members**

- **Dr. Shadab Anwar**
  - New Asst Professor in GE.
  - PhD Florida International Univ in Geosciences; BS/MS Civil Engrg
  - Lattice Boltzman modeling of flow through porous media

- **Dr. Mingzhen Wei**
  - New Research Asst Prof in Pet E.
  - PhD New Mexico Tech
  - Reservoir simulation, natural gas, digital oil field.

- **Dr. Baojun Bai**
  - Promoted to Assoc Prof and named to Lester R. Birbeck Chair in Petroleum Engineering
  - Worldwide expert in EOR methods, particularly polymers.

- **Dr. Franca Oboh-Ikuenobe**
  - Named Fellow of the Geological Society of America (GSA)
  - 2011-12 President of AAPS-The Palynological Society

- **Dr. Shari Dunn Norman**
  - Named Chair of the Society of Petroleum Engineers (SPE) Chair of the 2011-12 Engineering Geology Division of GSA.

- **Dr. David Rogers**
  - 2011 Meritorious Service Award of the Environmental & Engineering Geology Division of GSA.

- **Outstanding GSE Research**
  - $2.0 Million GSE Dept 2010 Research Expenditures
  - $3.6 Million GSE Dept 2010 New Research Awards
Mining and Nuclear Engineering
226 McNutt Hall, Rolla, MO 65409-0450, Phone: 573-341-4753; Web: http://mne.mst.edu

MNE STATISTICS

- Enrollment at 448 (no change); 245 Seniors, 101 ME/MS/PHD
- $320K in endowed, industry & competitive scholarships for AY2010-11
- MNE graduates the largest number of graduates in a decade: 50 MinE and 28 NuCE Graduates
- 100% placement for grads with $65K starting salary
- Overall, >90% of students involved in Department, Campus and External Extracurricular Activities

2011 RESEARCH NEWS

- $650K funding by CDC NIOSH, Caterpillar, Peabody on Dump Truck Vibrations Research
- $430K funding by Department of Homeland Security for Counter-Terrorism Research
- $1.7 M funding by CDC-NIOSH for Mine Safety and Health Research
- $2.4 M DOE award for Sturby Jet in Enhanced Geothermal Energy (With Impact Tech)
- DOE $180K funding for S&T-Lincoln Partnership in Education Research
- $1.75 M USNRC, USDOE, Research Board & Industry Funding for Faculty Develop, U/G Scholarships & Research Initiatives

A SUCCESSFUL IME 2011 CONFERENCE!!

DEPARTMENT ACTIVITIES

- S&T Mining Engineering hosts its FS 2011 Kick-Off Meeting at the Experimental Mine
- Several Students receive scholarships

Materials Science and Engineering
home of Ceramic and Metallurgical Engineering
222 McNutt Hall
Rolla, MO 65409-0340
Phone: 573-341-4401
Web: www.mse.mst.edu

Students

- 205 total undergrad students (up 7.3%) > 104 MetE / 101 CerE
- 60 graduate students (down 9%) > 13 Met / 10 Cer / 37 MSE
- $329K in endowed scholarships given out in AY11-12; $125K in competitive scholarships from professional organizations
- 100% placement rate in May 2011; starting salaries Met: $57,444 Cer: $64,880

Research

- A record year for research expenditures: $7.59 M (MSE generates 21.2% of the research on campus with 5.5% of the faculty).
- $5M renovation of the MRC in progress; Mar-2012 completion.
- MetE Students and Faculty receive AFS Best Paper Awards:
  - D. Kline, S. Lekakh and V. Richards, "Improving Investment Casting Mold Permeability using Graphite Particles"
  - L. Bartlett, K. Peaslee and D. VanAken, "Effect of Phosphorus and Silicon on the Precipitation of K-carbides in the Fe-30Mn-9%Al-X%Si-0.9%C-0.5%Mo Alloy System"

Faculty

- Kent Peaslee is now a Vice President of the AIST.
- Del Day received the 2011 Stookey Lecture of Discovery Award
- Wayne Huebner visited China as part of an exploratory visit to create a new university.

News from 2011-12

- The 22nd A. Frank Golick Lecture was given by Diran Apelian, Howmet Prof @ WPI
- The Missouri S&T "Miner Mayhem" team placed second in the TMS 2011 Materials Bowl Competition.
- MSE Alumni receive Professional Degrees at May commencement:
  - Paul I. Fleischut, B.S. MetE, '85 Partner, Patent Attorney at Senniger Powers, LLP
  - Dr. Paul Angel, B.S. CerE, '85, M.S. CerE, '87, NASA Glenn Research Center
  - Philip D. McPherson, B.S. CerE, '83 Senior VP and General Manager, Saint-Gobain Containers, Inc.