

Students

search

ė

a

Geological Sciences and Engineering

Geology, Geophysics, Geological and Petroleum Engineering

Faculty

ews

Z

Ш

S

C

ore

Ž

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

- 17 full time tenure track faculty in GSE
- Dr. Bob Laudon stepped down as GSE Chair. Thanks, Bob!



new GSE Chair.

our newest G&G faculty member. A Univ of Texas grad and former Chair of Geology at Wichita State. he will teach Petroleum Geology

Dr. Mike Whitworth (GE) retired.





GE 352 students take a break for a group photo during a visit to the Mayan ruins in Tikal, Guatemala.

Chair's Corner

Dear M&M Academy Members,



It is an honor to have been elected to serve as the new Chair of the Mines and Metallurgy Academy at Missouri S&T. I would like to recognize and thank Dianna Tickner for

her outstanding vision and contribu-7 tions while serving as Chair of our Academy during the 0 past three years. Under Dianna's leadership we have Ñ made significant contributions in support of the students and faculty of the Departments of Geological Sciences and Engineering, Mining and Nuclear Engi-S neering, and Materials Science and Engineering. A major contribution was our financial support for U needed laboratory equipment, particularly with the establishment of the new McNutt Computer Learning Center. Communication among our members also im-× proved with our newsletter and new website http:// web.mst.edu/~mmacademy. Last year the Academy instituted two awards to recognize outstanding efforts TTE by one senior and one junior faculty member. Each recipient received \$1000 plus an award certificate. The first two to be recognized under this new program were Dr. Jason Baird, Associate Professor of Mining À Engineering, and Dr. Baijun Bai, Assistant Professor of Petroleum Engineering at Missouri S&T.

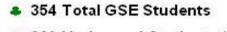
N Those of you that attended our April 2010 Academy meeting know that Ted Ruppert was elected our new M Academy Vice Chair. Ted has provided years of dedi-NE cation to our Academy with his service and financial support. Ted will also remain as chair of our Student Affairs and Scholarships Committee. I look forward to working with Ted as we continue to provide the best support possible to our students and faculty. Other committee chairs for the coming year will be Greg DE Skannal, Nominating Committee; and Ralph Flori, Strategic Planning Committee. Six distinguished graduates of Missouri S&T were

inducted into our Academy last April. They were Dr. Curt Elmore, Associate Professor of Geological Engi-C neering at Missouri S&T; MAJ Ryan Howell, Ph.D., × Military Deputy for the Army Research Laboratory; Paul Lang, Senior Vice President for Arch Coal Inc.;

Stephen Lang President and CEO Centerra Gold; Michael McCall, former Chairman and CEO of Luminant C Energy; and Fred Niemeier, Vice President of Portfolio

Management for Baird Capital Partners. Our Acad-emy's strength will be increased through our new member's enthusiasm and involvement in support of

our goals. We also recognized six seniors at our spring meeting with \$500 cash awards 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 as 2010 Scholars were Joshua Holzhausen (Ceramic), Travis Kassebaum



260 Undergrad Students (includes FEP) 62 G&G / 63 GE / 135 Petroleum

FALL 2010: Tremendous GSE Growth

94 Graduate Students 30 G&G / 23 GE / 41 Petroleum



MoS&T 2nd Place Team! PetroBowl 2009 ACTE New Orleans



Whittney Metcalf (Petroleum) MoS&T Human Powered Vehicle Team Won Sprint Race at 2010 California Competition Will seek world record in Sept 2010.

Outstanding GSE Research Productivity

\$1.54 Million GSE Department 2009 Research Expenditures

\$1.63 Million GSE Department 2009 New Research Awards



Dr. Hogan and Kristen Arneson at Victoria Falls Dr. Ralph Flori is the



Dr. Wan Yang is

and Sedimentology.



M&M Academy Meeting October 1, 2010 Business meeting: 9:00 a.m. – 2:00 p.m.

(Geological), Matthew Paradise (Petroleum), Jill Groeblinghoff (Mining), Shannon Stacy (Nuclear), and Hannah Terwelp (Metallurgical).

You will see attached information from our departmental chairs. A more detailed update will be given during our October meeting, including news of the new MS degree in explosives engineering that has been approved by the State of Missouri Coordinating Board of Higher Education. Enrollment continues to increase in our departments even with admission closing early for freshman students desiring to begin their engineering studies in August 2010. Those gualified undergraduate engineering students admitted after June 21 will be deferred to the spring 2011 semester.

We will receive a report on the very successful Advancing Excellence Campaign. This campaign ended June 30, 2010 with the University surpassing the \$200 million goal by nearly \$12 million. Over 85% of our Academy members were campaign donors. Money raised will be used to fund scholarships, upgrade facilities and equipment, and increase funding for research. This support has been especially critical in a time of reduced Missouri state support to higher education.

I hope to see you at our next Academy of Mines and Metallurgy meeting on Friday, October 1, 2010, the Missouri S&T Homecoming weekend. If you are able to arrive on Thursday, please plan to attend the second Dr. Thomas J. O'Keefe Lecture that will be given by Ken Gielow, MetE, 70 & 71.

Keith Wedge August 2010

		October 1, 2010 Meeting Agenda Carver/Turner Room Havener Center
	8:30	Continental Breakfast
	9:00	Opening Remarks / Introductions
	9:15	Approval of April 22, 2010 Minutes
	9:20	Committee Reports
		Nominating - Greg Skannal
		 Student Affairs and Scholarships – Ted Ruppert
		Strategic Planning –Ralph Flori
		 Jackling Report – Chris Ramsay
	9:45	Break
	10:00	University Advancement Report –Patty Ingle
	10:30	Department Reports
		Samuel Frimpong
		Wayne Huebner
)		Ralph Flori
	12:00	Working Lunch
	1:00	Old Business
		 Dr. Thomas J. O'Keefe Lectures
		Website update
		New Business
		 Election of four members-at-large to Executive Committee
		Committee membership assignments
	2:00	Open Discussion, Wrap – Up, Optional Tours Of Departments



Materials Science and Engineering

home of Ceramic and Metallurgical Engineering

- 174 total undergrad students (up 8) → 92 MetE / 82 CerE
- 62 graduate students (up 6) → 14Met/14 Cer/34 MSE

50 high school juniors and seniors attended the ASM Materials Camp during the last week of July. Activities included research projects, field trips and the "walk on water" engineering competition.







Faculty

Students

Research

- ≈\$310K in endowed scholarships given out in AY10-11; ≈ \$105K in competitive scholarships from professional organizations
- 80% placement rate in AY09-10; starting salary Met: \$59,289, Cer: \$57,100
- 3 Year average expenditures: \$6.1M (MSE generates 21.2% of the research on campus with 5.5% of the faculty).
- \$1.9M from NSF will fund the renovation of the MRC; total project ≈\$5M
- The new TEM has arrived - purchased with \$1.5M in funds from the NSF.



FEI Tecnai

F20 TEM

- The Cast Iron Division of the American Foundry Society selected the paper entitled "W.D. Peach, S.N. Leach, V. Richards and K. Peaslee, "Near Surface, Machinability of Cast Iron" to receive the Best Paper Award at the Cast Expo '10 / 114th Metalcasting Congress, March 21-23, 2010, Orlando, FL
- 17 fulltime T/TT faculty (UG student:faculty ratio =10.4:1)
- Rahaman to be named a Fellow of the American Ceramic Society at the 2010 MS&T Conference in Houston
- Day to receive the 2010 Phoenix Award for Glass Person of the Year in September.







MRC renamed Straumanis – James Hall in honor of Bill James, Professor Emeritus of Chemistry



The second Dr. Thomas J. O'Keefe Lecture will be given on September 30th by Ken Gielow, MetE '70 & '71



222 McNutt Hall Rolla, MO 65409-0340 Phone: 573-341-4401 Web: www.mse.mst.edu

MISSOURI SET

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

MNE STATISTICS

- 230 Seniors, Juniors, and Sophomores, 85 FEP; 57 MS/PHD & 45 ME; Total Enrollment of 416 (4% growth over last year)
- \$320K in endowed, industry & competitive scholarships for AY2009-10
- 90% placement for December 2009 grads with \$64K starting salary; 85% placement for May 2010 grads with \$60K starting salary
- Overall. > 90% of students involved in Department, Campus and External Extracurricular Activities

2010 RESEARCH NEWS



\$430K funding for Department of Homeland Security Counter-terrorism research



\$1.7 M funding for CDC-NIOSH Mine Safety and Health Research



- the \$2.4 M DOE award for Slurry Jet in Enhanced Geothermal Energy
 - DOE \$180K funding for S&T-Lincoln Partnership
- OTHERS: \$1.75 M USNRC, USDOE, Research Board & Industry Funding for Faculty Development, Undergraduate Scholarships & other Research Initiatives



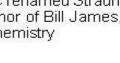


2010 Mucking Competition in Australia



NucE Faculty in Radiochemistry Facility







Mining and Nuclear Engineering

THE FUTURE OF NUCE !!!

U. AL Propulsion Res. Ctr.; N.KYU. Barton Lab; U. Maryland Space Sys. Lab; CO State Engines & Energy Conv. Lab: TTU Wind Science & Eng. Res. Ctr.; Cornell Game Design Initiative; UC Merced Dawson Lab; **Carnegie Mellon Robotics Institute**

Nuclear Renaissance: Celebrating the 50th Anniversary of S&T's Nuclear Engineering Program and the Nuclear Reactor Keynote Speaker: Dr. Stames Walker. Director of Research Programs, US Department of Homeland Security



Women in NucE with Senator Bond in DC





2010 Nuclear Camp for HS Students



2010 Explosives Camp for HS Students



Breaking Ground for the New Missouri S&T Experimental Mine Building