



McNutt Computer Learning Center – Room 114  
Facility provides a 40-Seat Workstations (with very High Computational and Graphics Capabilities for advanced computer modeling, design, and systems simulation



McNutt Computer Learning Center – Room B14  
Facility provides a 22-Seat Computer Workstations with additional Six 36" Flat Panels (with CPU Stations) for Collaborative Work on Design Projects

**Dedication of the ≈ \$300K CLC by Mines & Met Academy – 02/23/09**

**Cake Cutting by Ted and President Forsee**



**Address by Keith Wedge**



**Address by Ted Ruppert**



### Academy Funded \$46K Nuclear Equipment

Lynx Digital Signal Analyzer, Genie 2000 software & Gamma Analysis Tool: This equipment is used to offer distance courses

Tail Pulse Generator, Multichannel Scaler and Associated Electronics: This state-of-the-art electronics was purchased using Mines & Met. Academy funds to be used in nuclear radiation detection and spectroscopy laboratory classes.

MS&T Physical Facilities (Fulton 214- installations): Provides live two-way communication system to teach distance class from 214 Fulton Hall

# M & M Academy Newsletter

## Chair's Corner

Dear M&M Academy Members,

Greetings from the Academy. This message follows "The Best Ever", 101<sup>st</sup> celebration of St. Pat's at Missouri S&T! The chairs report that everybody made it through the festivities in one piece, and the students are working hard to survive a round of exams prior to Spring Break. In this Newsletter the focus is on good news coming from the departments, and the impact the Academy has had on student success through our investments of time and funding. You will find a short overview of all the equipment now in place being used weekly in the undergraduate labs, and the new computer-learning-centers (CLC's) that were dedicated in February.

The recession is definitely impacting recruitment activities. The number of recruiters at the Spring Career Fair was down sharply to 156 (over 300 came in the Fall). Usually at this time of year most of the May graduates already have at least one job offer lined up. At the moment the chairs report many ≈ half of the students are still looking. If you know of any job opportunities please pass them along to them.

The official results of the ABET review are in, and I am happy to report that with our help the departments received passing grades on criteria related to facilities and equipment. As we reported (but weren't supposed to) in the last newsletter, overall the departments did not come out unscathed – most received weaknesses in areas related to the assessment of program educational objectives and outcomes. At the upcoming meeting the Chairmen will ask the Academy to serve as external evaluators of student work throughout the year – an important activity necessary for ABET accreditation.

We're hoping to see you at the April Academy meeting. **Please come** – through our time, connections and resources we are truly making a difference in the lives and success of students. A meeting agenda is shown to your right. Highlights:

- ◆ Seven Academy Scholars will be named again at the spring meeting, and their friends and family will attend the dinner.
- ◆ Six new members will be inducted into the Academy.
- ◆ The criteria for a new faculty recognition award will be decided.
- ◆ The new M&M Academy website will be shown.
- ◆ Student design teams will be making presentations.
- ◆ Spouses will enjoy pouring molten metal in the foundry.

The students and faculty are clearly aware of the role the M&M Academy has played during a critical juncture in the future of our alma mater. History will show that our small group of dedicated alumni made important contributions at a time of need. The reward is knowing that we have simply carried on what has always been the tradition of our school - student success. I encourage you to become an active member.

Dianna Tickner  
March 2009



### Meeting Agenda April 16, 2009

- 11:30 AM Optional Lunch
- 1:00 PM Opening Remarks / Introductions
- 1:10 PM Committee Reports
- 🍏 Executive
- 🍏 Academy Nominations
- 🍏 Scholarship (Scholar Award)
- 🍏 Jackling
- 2:15 PM Break
- 2:30 PM Review & Update on Website
- 2:45 PM Faculty Recognition Award
- 3:00 PM Departmental Reports
- 🍏 Samuel Frimpong
- 🍏 Wayne Huebner
- 🍏 Bob Laudon
- 4:00 PM Discussion
- 🍏 O'Keefe bust or other tribute
- 4:45 PM Adjourn
- 6:00 PM Reception (McNutt)
- 7:00 PM Dinner, Scholar Awards & Induction Ceremony

### Spouse's Agenda April 16, 2009

- 11:30 AM Spouse's Luncheon/Sybill's
- 2:00 PM Presentation

### Leco CS600 C/S Analyzer

Cost : \$80K  
F(x) : measurement of carbon and sulfur content in steels  
Use : Met 308: "Metals Casting Lab"  
Met 421: "Ferrous Casting Alloys"  
Impact : allowed development of new labs desired by industry



### Microtrac / Nanotrac

Cost : \$45K  
F(x) : measurement of the particle size distribution of fine powders using laser scattering  
Use : Cer 231: "Ceramic Processing Lab I"  
Cer242: "Ceramic Processing Lab II"  
Impact : allowed development of new labs to measure particles produced by hydrothermal synthesis



### New Furnaces

Cost : \$30K  
F(x) : binder burnout, calcination, sintering  
Use : Cer 231: "Ceramic Processing Lab I"  
Cer242: "Ceramic Processing Lab II"  
Impact : addressed critical shortage of furnaces available to run labs due to our growing enrollment

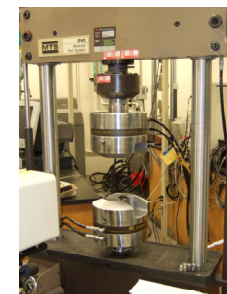


### General Lab Equipment

Cost : \$25K  
F(x) : safety, chemical storage, mechanical testing  
Use : All UG labs.  
Impact : addressed critical lack of appropriate facilities.



Flammable chemicals storage cabinet



Compressive plattens for an MTS load frame



Biocidal cabinets with Safety goggles for all labs

### Spring 2009 News —Many field trips including Faculty and Students



S&T students in Guatemala working with local students, Dec. 2008.



Dr Leslie Gertsch addressing the International Mineral Processing Congress in Beijing, China, Sept. 2008.



Students discussing physical properties of sand, Ethiopia, January 2009.



S&T Students collecting geophysical data in Egypt, January, 2009



S&T students building filters for clean water projects in Guatemala, December 2008



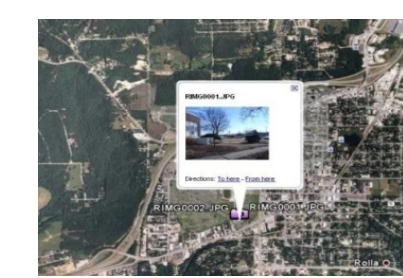
Dr. Curt Elmore's Renewable Energy Demonstration Project, Rolla, January, 2009



Dr. Franca Oboh-Ikuenobe and students in Egypt, December 2008.



S&T students on the Lake Superior field trip, May 2008



Rock Mechanics lab at S&T. Created with special GPS camera donated by Mr. Ted Ruppert



Three of 17 equipment items purchased recently for Petroleum Engineering laboratories. Many thanks to Mr. Ted Ruppert.

