



ABE-Notes

Welcome Back ABE Students!



AGRICULTURAL & BIOLOGICAL ENGINEERING

Issue 11– August 15, 2007

Funding Opportunities

Diversity Faculty Fellow - the time has come again for interested faculty to submit their application for consideration as a 2007-2008 Diversity Faculty Fellow. This past academic year we had one Diversity Faculty Fellow, B. Allen Talbert, professor in YDAE who successfully completed the program!

Our college can support up to two faculty for the upcoming year. Each fellow will receive a \$2000 grant to revise a course by incorporating a diversity component or develop a new diversity related course. For further information contact Pam Morris, Assistant Dean/Director in the Office of Diversity at 494-8293 or via email at pmorris@purdue.edu. Note: Application deadline is by 5:00 pm., Friday, August 24, 2007!!!!



John Lumkes - \$130,609. Parker Hannifin Corp. "Parker High Speed Digital Valve Project".

Al Heber and Teng Teeh Lim - \$40,000. Indiana Soybean Alliance. "Improving the Purdue Odor-Based Setback Distance Model and Interactive Website".

Michael Ladisch and Nathan Mosier - \$59,821. Corn Products US. "Test Agreement on Corn Analysis".

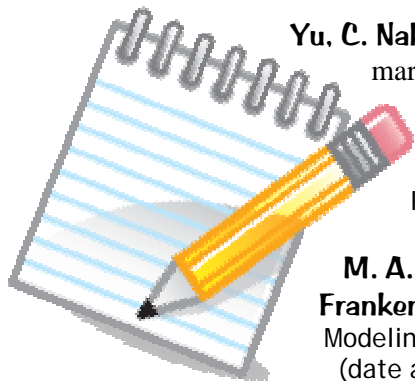
Ganesan Narsimhan - \$15,712. Purdue Research Foundation. "Unfolding Kinetics of Proteins at Nanoparticle Surfaces".

Lawrence Theller and Goufan Shao - \$364,500. Via Technologies, Inc. "A Working Plan of GIS Team for the ZT Vineyard Project."

John Lumkes - \$3,135. National Fluid Power Association. "Portable Pneumatic Trainer for Hands-on Demonstrations".

Collaboration in Biomedical Research - A new round of funding has become available for this program, which is now in its fourth year, and has been a catalyst for the development and ongoing support of collaborations that continue to lead to larger grant applications and awards, publications, intellectual property, and presentations. This round, CBR4, will support seven \$50,000 awards shared between Purdue West Lafayette/ IU School of Medicine research teams. The deadline for receipt of applications is November 12. For program guidelines and the application, please see <http://www.purdue.edu/research/vpr/funding/iu-purdue.html>.

Papers



Yu, C. Naksharti, H., and Irudayaraj, J. 2007. Identity profiling of cell surface markers by multiplex gold nanorod probes. *Nano Letters* (In Press).

Sabrina S. Jedlicka, Jenna L. Rickus, Dmitry Y. Zemlyanov - "Surface Analysis by XPS of Sol-Gels Modified with Covalently Bound Peptides" - *J. Physical Chemistry*.

M. A. Thomas, B. A. Engel, M. Arabi, T. Zhai, R. Farnsworth, and J. Frankenger - "Evaluation of Nutrient Management Plans Using An Integrated Modeling Approach" accepted for publication in *Applied Engineering in Agriculture* (date accepted 08/10).

Yu and Irudayaraj - Second most accessed article (April-July 2007) in *Analytical Chemistry*, "Multiplex Biosensor using Gold Nanorods" - http://pubs.acs.org/journals/ancham/promo/most/most_accessed/index.html.

Yu, C. and Irudayaraj, J. 2007. Surface modification of CTAB capped gold nanorods. *Langmuir*, 23:9114-9119.

Yu, C. and Irudayaraj, J. 2006. Sensitivity and Selectivity limits of multiplex nanoSPR biosensor assays. *Biophysical Journal*. (In Press)

Seminars/Workshops/Lectures



International Conference of Biorefinery - Beijing, China, October 20 - 23, 2007. In the century, biobased industry producing chemicals and fuels from renewable raw materials will play an important role due to the depletion of petroleum oil, and the environmental and energy problems in the world, and biorefinery will greatly contribute to a sustainable development of the world. In the conference, there will be a forum to discuss a variety of topics and present recent scientific researches. The Social Program will also be scheduled, offering ample opportunities to renew standing friendships and forge new ones from all around the world. In addition, Beijing has four world cultural heritages including the Great Wall, the Summer Palace, the Forbidden City, and the Temple of Heaven. October is the golden time for traveling to Beijing. Participants and their families

may take advantage of this opportunity to enjoy the visiting of Beijing and the delicious Chinese food.

Klein Ileleji - gave a seminar on his research "Material processing and handling of biofeedstocks for food, feed, fuel and fiber production" at the Graduate School of Bio-Applications and Systems Engineering, Tokyo University of Agriculture and Technology, Koganei Campus, Japan. Picture shows Klein after his talk with faculty, Prof. Masayuki Horio (looking at picture standing right of Klein) and Prof. Hidehiro Kamiya (standing left of Klein), and students and staff of their research groups working in the area of powder technology and thermochemical conversion of biomass.



ABE in the News/Awards

Irudayaraj and Coworkers - Gold nanorods in cancer research - Purdue news release:

<http://news.uns.purdue.edu/x/2007b/070730IrudayarajNano.html>. Science

Daily: Gold nanoparticles may pan out as tool for cancer diagnosis. Breast

Cancernet news: *Surface Modification of Cetyltrimethylammonium Bromide-Capped Gold Nanorods to Make Molecular Probes.*



Student News

Bioethics Essay Contest - submit a 1000 or 1200 word, original essay on a bioethics topic of your choice by November 1, 2007, to be part of this year's contest. Five semifinalists will be selected by January 7, 2008 - all semifinalists will be given complimentary registration to the 2008 annual meeting of the Institute of Biological Engineering to be held March 6-9, in Chapel Hill, North Carolina. At the 2008 EBE meeting, the semifinalists will read their essays and the finalists will be selected. Cash awards are \$150 for first place, \$100 for second place and \$75 for third place. For more information visit the web site at: www.lbe.org.

Mark Thomas - was one of three graduate mentors for the 185 students in the SURF program. SURF stands for - The College of Engineering

Summer Undergraduate Research Fellowship

Symposium which allows participating students to showcase their research

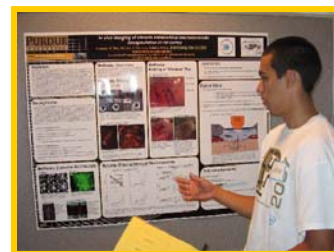
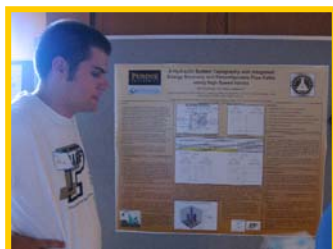
accomplishments after 11 weeks of research.

The Symposium was held on Tuesday, July 31,

2007 at the Stewart Center. SURF provides

undergraduate students with an avenue to

perform research in an academic environment while exploring future graduate study options.



**Join Us for ABE's
New Graduate Student
Orientation and
Departmental Welcome!
Friday, August 24, 2007
ABE #301 at 3:30 pm**

Klein Ileleji and Cedric Ogden (PhD student) - visited Zhejiang University in Hangzhou, China in late June where Cedric spent a one month research collaboration at the State Key Lab for Clean Energy Utilization at Zhejiang University. The picture shows Klein, Cedric, Prof. Sheng and his student Fan Kuo of the Biosystems Engineering and Food Science College.



JD McClurkin - has recently returned from a summer internship at NASA Langley Aerospace Research Center in Hampton, Virginia - look like fun!

Graduate Student Association Callout - meet your fellow ABE Graduate Students and learn more about the new ABE Graduate Student Association - while enjoying **FREE** ice cream!

Who: All ABE Graduate Students
Date: Friday, August 24th
Time: 4:30 pm
Where: ABE #301



PICNIC

Welcome Back Picnic
Wednesday, August 29
ABE #106 at 5:30 pm

Retiree & Alumni News

Scott Halterman (BS ABE 84', MS ABE 86') - is Chief Engineer of the Commercial Marine business within the High Horsepower Engineering organization at Cummins.

Darrell McCauley (PhD. ABE 95') - is Engineering Manager for Austin Technology Center, his group develops GPS receivers, guidance products and steering controllers as well as developing marine navigation packages.

Jeremy Korniak (BS ABE 93') - is currently a training program with Covidien, after completion his position will be Regional Manager for the Ohio Region.

FYI

Purdue Utility Plant - asks that everyone take steps to help reduce the demand placed on the chillers, by shutting off lights in unoccupied areas and turning off unnecessary/unused equipment and appliances.



Construction Updates -

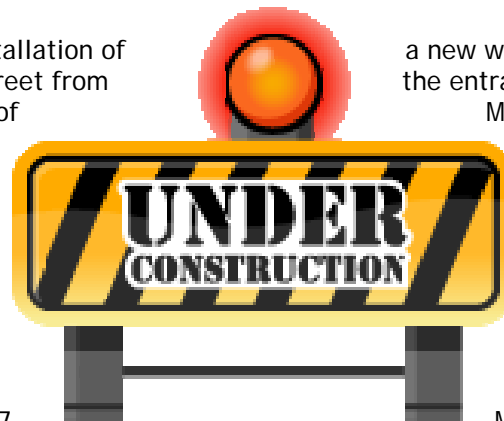
Due to the demolition of the Service Building and the construction of Hockmeyer Hall Structural Biology, the parking lot west of the Soil Erosion Laboratory will permanently close August 13, 2007.

Nimitz Drive, between South Russell Street and South Martin Jischke Drive, will permanently close August 13, 2007.

On August 13, 2007, the installation of on the south side of First Street from parking lot to the east side of caution in the area.

First Street, from entrance of the parking close on September 4, of a utility steam tunnel, new water main, and It will be closed for

Beginning September 4, 2007, Street to the drive on the north side of Harrison Hall will be reduced to northbound traffic only for approximately 3-4 weeks. There will be a weave back to two way traffic between First Street and the drive north of Harrison Hall. Signs will be installed on McArthur Drive and at the 3rd Street and McArthur Drive intersection as well as the State Street and McArthur Drive intersection. This project is for the installation of new chilled water mains.



a new water main under the sidewalk the entrance of the Fowler House McArthur Drive will begin. Use

McArthur Drive to the west lot at Fowler House, will 2007, for the installation an electrical duct bank, a multiple storm sewer pipes. approximately 3 months.

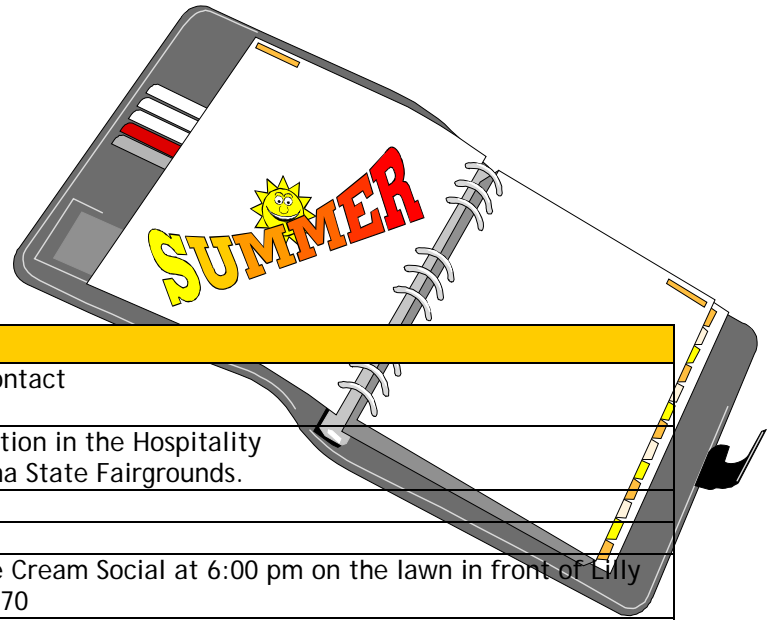
For latest updates visit http://www.purdue.edu/physicalfacilities/travel/pdf/soil_lab_closures.pdf.

Purdue Graduate Student Government - is sponsoring its annual fall picnic on Friday, August 24th from 5:00 pm to 7:30 pm in Squirrel Park (located at the corner of Airport Road and Nimitz Drive) - hamburgers, veggie burgers, hot dogs, side dishes and dessert will be provided.



CARe Initiative - has been working with one of Indiana's most impoverished communities, Migrant Farm Workers and could use your donations of new and clean gently used clothing for adults and children, items for personal hygiene, new and clean gently used toys and books, household items, laundry supplies, conference bags, etc. A box for these donations is outside of ABE #208, and Carol Sikler is pleased to report that she has made three trips to the CARe center and delivered 6 bags of clothing and 3 boxes of school and cleaning supplies.

Calendar



August 2007	
15	Purdue Day at the State Fair - contact D. Kirkpatrick at 494-9113
15	Dave Petritz Retirement Celebration in the Hospitality Tents near Gate 12 on the Indiana State Fairgrounds.
20	Classes Begin
21	Faculty/Staff meeting ABE #301
21	Annual College of Agriculture Ice Cream Social at 6:00 pm on the lawn in front of Lilly Hall - contact T. Egger at 494-8470
28-30	Farm Progress Show in Decatur, Illinois - contact D. Kirkpatrick at 494-9113
29	ABE Welcome Back Picnic
September 2007	
1	Purdue Football - vs Toledo (Away Game)
3	University Holiday
4	Faculty/Staff meeting ABE #301
6-8	Farm World Expo in Terre Haute, Indiana - contact D. Kirkpatrick at 494-9113
8	Purdue Football - vs Eastern Illinois (Home Game)
11-12	Purdue Industrial Roundtable
15	Purdue Football - vs Central Michigan (Band Day/Family Day) (Home Game)
18	Faculty/Staff meeting ABE #301
18-20	Ohio State Farm Science Review in London, Ohio - contact D. Kirkpatrick at 494-9113
22	Purdue Football - vs Minnesota (Away Game)
29	Purdue Football - vs Notre Dame (Home Game)
October 2007	
2	Faculty/Staff meeting ABE #301
2	College of Agriculture Career Fair - PMU - contact L. Barber at 494-8470
6	Purdue Football - vs Ohio State (Home Game)
7	College of Agriculture Scholarship Banquet - PMU - contact L. Barber at 494-8470
13	Purdue Football - vs Michigan (Away Game)

16	Faculty/Staff meeting ABE #301
20	Purdue Football - vs Iowa (Hall of Fame Weekend) - (Home Game)
24-27	National FFA Convention in Indianapolis - contact T. Egger at 494-8470
27	Purdue Football - vs Northwestern (Homecoming/Varsity P Club Weekend) - (Home Game)
28-30	ABET visit
30	Faculty/Staff meeting ABE #301 (ABET visit)
November 2007	
3	Purdue Football - vs Penn State (Away Game)
10	Purdue Football - vs Michigan State (Home Game)
13	Faculty/Staff meeting ABE #301
14	PCARET State Conference - contact T. Rogers at 494-8489
16-17	Agronomy Centennial Celebration at the Beck Center - contact K. Delp at 494-6586
17	Purdue Football - vs Indiana (Away Game)
27	Faculty/Staff meeting ABE #301
December 2007	
11	Faculty/Staff meeting ABE #301