

Christian Brothers University

SCHOOL OF ENGINEERING



Chemical



Civil



Electrical



Mechanical



Graduate Engineering

Engineering Newsletters

December 2004

CAPE PACKAGING SOFTWARE DONATED

CAPE Systems, Inc., (www.capesystems.com) in Allen, Texas, has recently donated CAPE PACK software for use in the CBU Packaging Engineering Certificate Program. CAPE PACK is a suite of programs that will aid in the design of product, bundle packaging, shipper design and pallet configurations. The Display Pallet portion is a database program that will store product information for easy data entry and create loads of mixed-size items. It will calculate various loads for the designer to choose from and also offers an editor that will allow for easy customization. CAPE PACK also offers compression strength analysis, a case consolidation program and KDF functionality. The package designer can easily import data into or export data out of the software in order to integrate with other systems. More information about the software can be found at: http://www.capesystems.com/pallet_packaging_software_what.htm.

CAPE Systems, Inc. has been an innovative international leader in the computerization of packaging design and palletization since 1969. Its mainstay packaging analysis software, CAPE PACK®, provides packaging designers and engineers, logistics professionals, and others involved in the packaging process with the comprehensive tools needed to produce designs that provide maximum space utilization while allowing for marketing creativity. Trading under the name CAPE Systems, the CAPE parent company, CAPE Systems & Consulting Services (CS&CS Ltd.), has been involved in the British and international markets since 1984. CAPE Systems, Inc. is the North American headquarters of the CAPE organization. CAPE's products are also represented in Australia, Canada, Denmark, Germany, Israel, Korea, Malaysia, Mexico, New Zealand, South African, Scandinavia,

and Thailand, through relationships with 11 independent reseller organizations.



HIGH SCHOOL OUTREACH ACTIVITIES

On November 8th, **Dr. Bob Drake** (ECE) and **Dr. Randel Price** (ChE) attended the meeting of the Memphis City Schools teachers who are involved with SECME to discuss the speakers program and upcoming high school competitions. SECME's goal is to increase the pool of historically under-represented, geographically under-served, and differently abled students who will be prepared to enter and complete post-secondary studies in science, technology, engineering and mathematics (STEM), thus creating a diverse and globally competitive workforce.

Dr. Randel Price (ChE) also visited Memphis City Schools' Kansas Career and Technical Center on December 7th. The school provides vocational/technical classes taken by students from a number of Memphis City Schools.



The International Paper Foundation recently granted CBU Engineering funds to offer a one-week packaging summer program for high school students for the 2nd year in a row. The first program was offered in June 2004 and the 2nd one will be offered during the summer of 2005. Dates will be announced in early spring. **Br. Stan Sobczyk**

(President), **Dr. Pong Malasri** (Dean) attended the Awards Breakfast on December 15th along with **Mr. Michael Belk** (MEM and IT Project

Manager at International Paper) who sponsors the project.

Dr. Pong Malasri (Dean) recently joined the newly formed Engineering & Computer Science Advisory Council at East High School.

TOP 10 DEGREES IN DEMAND

According to the CNN Money web site on November 14, 2004, the job market for the class of 2005 looks more robust than 2004. Here is a list of the Top Ten degrees in demand:

- Accounting
- **Electrical Engineering**
- **Mechanical Engineering**
- Business Admin/Management
- Economics/Finance
- Computer Science
- **Computer Engineering**
- Marketing/Marketing Management
- **Chemical Engineering**
- Information Sciences and Systems

APRIL 2005 FE EXAM APPLICATION DEADLINE: JANUARY 7, 2005

Attention Seniors! If you plan to graduate in May 05, August 05, or December 05, you are eligible to take the FE exam on Saturday, April 16, 2005. If you plan to take the exam, you need to register now. You must turn in the application to Ms. Leslie Dunn in the Engineering Dean's Office by Friday, January 7, 2005. We need to send it to the State Office by January 15, 2005. The application form can be found at <http://www.state.tn.us/commerce/boards/ae/eintSenior.html>.

If you do not want to take the FE exam now, please read the following paragraph from **Marolyn Howe**, P.E. (ChE '81), Environmental Manager with Mueller Industries, Inc.: *"It is best to take the FE Exam when the information is freshest in your mind. Passing the exam says to a prospective employer that you meet the standard of competence. Being a P.E. puts you on a level playing field with all other engineers that are Registered Professional Engineers. In some cases it can mean the difference in a promotion, getting an interview for a new position and being offered a better position with another company/firm. It is especially important for women since in many areas, women are still not taken seriously as engineers. It recognizes that you meet the same standard as male engineers."*

If you want to know more about why you should get licensed, check out the NSPE's web page at: <http://www.nspe.org/lc1-why.asp>.

STUDENT NEWS

Congratulations to the following engineering students who were recently inducted into Tau Beta Pi:

- **George DeJean**
- **Jiexin Deng**
- **Joshua Dove**
- **Leon Faison**
- **Jennifer Foley**
- **Michael Hibler**
- **Joshua Holtgrewe**
- **Phuc Linh Nguyen**
- **Leslie O'Neal**
- **Elin Thorsteinsdottir**
- **Andrew Warren**
- **Nathaniel Wellikoff**

Dr. Fred Terry (ECE), Mr. Gene McGinnis (CEE), and Dr. Asit Ray (ChE) attended the ceremony.



Participants of Fall 2004 Tau Beta Pi Ceremony

ALUMNI NEWS

Angela Michelle Coulter (ME'95) recently joined BE Aerospace Company, Winston-Salem, NC, as Design Engineer. She develops basic design concepts used for design, development and production of sheet metal, composite and injection molded parts for seat assembly to add video monitors using UG NX2. Michelle graduated from CBU Magna Cum Laude. Since then, she has worked with various firms including Boeing Company in Long Beach - California as Associate Engineer Scientist, L-3 Communication Systems/Integrated Systems (formerly Raytheon and later E-Systems) in Greenville – Texas as Mechanical Engineer, and Safire Aircraft Company in Miami – Florida as Aircraft Design Engineer.

Congratulations to **Joe Beaini (EE'81 and former professor)**. Joe recently joined 26,000 others worldwide as a Senior Member of IEEE.

2004 FACULTY PUBLICATIONS

- B. B. Beard and E. B. Welch, "The Compleat Engineer," Proceedings of the 2004 American Society for Engineering Management National Conference, October 2004.
- George Brian DeJean, Jeffrey King, Yeu-Sheng Paul Shiue, and Bill Pannell, "Lunar Cargo Lander Design," Proceedings of the Huntsville Simulation Conference, October 2004.
- Ramesh Chawla and Ali Pourhashemi, "Contaminated Sand Remediation By Thermal Desorption/Oxidation," Proceedings of the 7th International Symposium on Environmental Geotechnology and Global Sustainable Development, June 2004. (Abstract)
- Ramesh Chawla and Ali Pourhashemi, "A Mass Transfer Experiment Using Deoxygenation and Aeration of Water," Proceedings of the ASEE 2004 Annual Conference & Exposition, June 2004.
- Robert Drake, "Use of Power Electronic Speed Controllers in Academic Programs," Proceedings of the NSF-Faculty Workshop on Teaching of Courses in Power Electronics and Electric Drives, February 2004.
- Paul D. Dunbar, Lori Morris, and L. Yu Lin, "Construction and Testing of a Pilot Scale Drinking Water Treatment Process," Proceedings of the ASEE 2004 Annual Conference & Exposition, June 2004.
- Eugene Fayne, Leonard Mills, Patrick Ireland, Joan McGrory, and John Ventura, "LabVIEW: Instrumentation Lab and Industry," Proceedings of the MAESC 2004 Conference, May 2004.
- Christopher Foster and Asit Ray, "LED Kayak Paddle," Proceedings of the MAESC 2004 Conference, May 2004.
- Favian de Lima, Brandon Cartwright, and John Ventura, "Portable Restroom Lighting," Proceedings of the MAESC 2004 Conference, May 2004.
- Ian Gilmore and Joseph Londino, "Using Artificial Neural Networks to Predict Grinds for the Small Block Chevrolet Camshaft in Aftermarket Applications," Proceedings of the MAESC 2004 Conference, May 2004.
- Neal Jackson, "Certification Process for the Master of Engineering Management Program at Christian Brothers University," Proceedings of the MAESC 2004 Conference, May 2004.
- Neal Jackson and L. Yu Lin, "Knowledge Sharing Networks and Communities of Practice," Proceedings of the MAESC 2004 Conference, May 2004. (Abstract)
- Jeffrey King, George Brian DeJean, Bert Dolerhie, Yeu-Sheng Paul Shiue, Bill Pannell, and James McCarter, "Integration of Launch Vehicle Simulation/Analysis Tools," Proceedings of the Huntsville Simulation Conference, October 2004.

- Peter Limper and Max Maloney, “Ethical Considerations Relating to Intellectual Property Protection”, Proceedings of the MAESC 2004 Conference, May 2004. (Abstract)
- L. Yu Lin and Don Davenport, “Hydrologic Analysis Using GIS and HEC-1 Model,” Proceedings of the Fourteenth Annual Tennessee Water Resources Symposium, March-April 2004.
- K. Madhavan, “Failure Case Study in an Undergraduate Civil Engineering Program,” Proceedings of the MAESC 2004 Conference, May 2004.
- K. Madhavan and S. Malasri, “Registration of Engineering Faculty – Preliminary Survey Results,” Proceedings of the MAESC 2004 Conference, May 2004.
- Siripong Malasri, “Hands-on Engineering Education,” Proceedings of the MAESC 2004 Conference, May 2004. (Abstract)
- Siripong Malasri, Randel Price, Yeu-Sheng Shiue, Asit Ray, Eugene McGinnis, Ali Pourhashemi, K. Madhavan, Joseph Londino, and John Ventura, “CBU Engineering Lab Facility,” Proceedings of the MAESC 2004 Conference, May 2004.
- John McQuary, L. Yu Lin, and Tracy James, “Communities of Practice,” Proceedings of the MAESC 2004 Conference, May 2004. (Abstract)
- Gieselle Mendonca, Monroe Sparks, and John Ventura, “Design and Implementation of a Conveyor Control System,” Proceedings of the MAESC 2004 Conference, May 2004.
- Ali Pourhashemi and Ramesh Chawla, “Influence of Temperature on Contaminated Sand Treatment,” Proceedings of the MAESC 2004 Conference, May 2004. (Abstract)
- Ali Pourhashemi and Randel Price, “Challenges in Transforming ChE Labs,” Proceedings of the MAESC 2004 Conference, May 2004.
- Judy Ramage and Howard Lawrence, “Sarbanes Oxley: Legislating Good Behavior,” Proceedings of the MAESC 2004 Conference, May 2004. (Abstract)
- Asit Ray, Siripong Malasri, and Yongquan Zhou, “Teaching Packaging Engineering at Christian Brothers University,” Proceedings of the MAESC 2004 Conference, May 2004.
- Khyati Shastri, Joe Treska, and John Ventura, “Automation of a Packaging Line,” Proceedings of the MAESC 2004 Conference, May 2004.
- Paul Shiue, “Put Your Imagination into Reality: Design Through Manufacturing and Product Realization,” Proceedings of the MAESC 2004 Conference, May 2004.
- Yeu-Sheng Paul Shiue, “Knowledge Bowl for Manufacturing Processes,” Proceedings of the ASEE 2004 Annual Conference & Exposition, June 2004.
- Fred Terry, “Engineering Problem Solving in a Moral and Ethical

Context,” Proceedings of the MAESC 2004 Conference, May 2004. (Abstract)

- John Ventura and Matthew Ventura, “Animated Agents: Motivational Consequences,” Proceedings of the IEEE SoutheastCon 2004 Conference, March 2004.

[CBU Home](#) | [Engineering Home](#) | [Chemical](#) | [Civil](#) | [Electrical](#) | [Mechanical](#) | [Management](#)