

School of Engineering

CHRISTIAN BROTHERS UNIVERSITY

News - January 2002

PROFILE

Department of Chemical & Biochemical Engineering

Department of Chemical and Biochemical Engineering (previously Chemical Engineering), is the youngest department in the School of Engineering at Christian Brothers University (CBU) and the only chemical engineering program in Memphis. The department offers an ABET accredited Bachelor Degree of Science in Chemical Engineering. It has granted more than 250 B.S. degrees in chemical engineering since its establishment a quarter of a century ago. About 50% of the graduates are working in Tennessee as a plant manager, project manager, design engineer, project engineer, production engineer, quality controller, environmental engineer, consultant, business coordinator, or sales engineer. A number of our graduates went on to graduate from some of the most prestigious medical schools in the country.

The ChE department consists of three full-time faculty members and one adjunct. All courses are taught by experienced faculty. Due to the small class size, the department offers individual attention to undergraduate students. After graduation these students are prepared for advanced study in graduate school or go on to successful careers in industry. Many students have participated in internship programs offered by local industries where they were coached by practicing engineers. We offer unique courses in polymer and packaging engineering. Only a few undergraduate chemical engineering programs in the nation offer such courses. The ChE undergraduate laboratory is equipped with a variety of lab equipment, including computer data acquisition systems. Our students learn to use state-of-the-art software, such as ASPEN PLUS and MATHLAB, as part of their coursework throughout the curriculum. Even though the main purpose of the department is to train and produce skilled undergraduate engineers, its faculty members are involved in applied research in their field of specialties.

Chemical / Biochem Engineering

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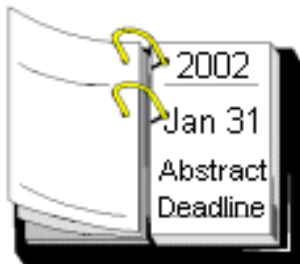




The CBU ChE department offers two different tracks: traditional chemical engineering and emerging biochemical engineering. A plan to offer a Packaging Engineering Certification program is in preparation. Our new biochemical engineering track provides a great opportunity for those who have an interest not only in engineering but also in biology and chemistry. The biotechnology industry develops and designs the processes needed to grow, handle, and harvest living organisms and their by-products. CBU is among the very few chemical engineering departments in the south that not only has realized the importance of biotechnology for the new millennium but also adopted this new track in the fall of 2001. The department expects to graduate their first class of biochemical engineers in 2005.

For more information, please check the ChE department website at <http://www.cbu.edu/engineering/chdept.html>. Dr. Ali Pourhashemi, department chair, can be reached at (901) 321-3401 or apourhas@cbu.edu.

MAESC 2002 CONFERENCE



The abstract submission deadline for the MAESC 2002 Conference is January 31, 2002. If you cannot meet the deadline, please contact Dr. Siripong Malasri at pong@cbu.edu or (901) 321-3419 as soon as possible. The theme of this year's conference is Building Foundations for a Better Tomorrow. The conference will cover many diverse topics. Areas include, but are not limited to the following: biology, biochemistry, bioengineering, genetic engineering, biochemical, environmental engineering/science, biomedical, biological-inspired computing, commercialization of biotechnology, graphics, research, economy, emerging technology, imaging, optics, emergency response/ readiness, simulation/ modeling, DNA, neuroscience, encryption, pharmaceutical, virus/ bio warfare, and infrastructure. All abstracts are to be submitted via email to maesc@cbu.edu. Check the web site at <http://www.cbu.edu/engineering/maesc> for more information.

ALUMNI NEWS



Congratulations to **Eric Brown** (ChE'97) on the birth of his new baby boy. Colby Martin Brown was born on December 15, 2001, at 1:38 p.m., weighing 5 lbs. 14 oz., and 18" long.

Mark your calendar! The School of Engineering plans to have a golf get-together on Monday, April 15, 2002. This is a great opportunity for engineering alumni to get together. Thanks to **Dick Gadomski** (ChE'62) and **Bobby Fisher** (CE'70) for organizing this golf activity. More information is forthcoming.

Congratulations to **Tim Mulrooney** (CE'97) for passing the recent PE exam! Tim currently is a civil engineer with Allen & Hoshall in Memphis, TN. He said recently about his new professional status, "*Thanks to the staff at Christian Brothers University for helping me achieve this goal.*"

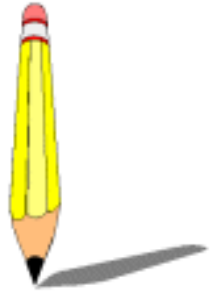
Attention Engineering Alumni! We need your help...

- We need volunteers to call prospective yet accepted  students who are interested in pursuing an engineering major on Monday, March 4 from 6-9 p.m. at CBU. Volunteers will share their CBU engineering experience and their work experience with the student (and sometimes the parents!) during the calls. It's fun and it is extremely helpful in securing the best and brightest students for CBU. A mix of disciplines is needed. Please contact Shawna Engel in the Alumni Office at alumni@cbu.edu or 321-3254 to volunteer.
- Also, the School of Engineering is developing a Speakers Program for high school students. Faculty and alumni offer to talk to high school classes in the areas of their expertise. A pilot Speakers Program will only be available for selected schools in Shelby County this spring. It is difficult for many high school students to understand exactly what it is that an engineer does. For you to share your work experience, as well as your CBU experience, would mean much more than any brochure a student could read. Local alumni! If you are interested in talking to high school students about what you do, please contact Dr. Siripong Malasri at pong@cbu.edu or 321-3419.



FACULTY NEWS

Below is a list of faculty publications in 2001:



- Xabier Basogain, Mikel Olabe, and **J.C. Olabe**, "Course on Artificial Neural Networks: Digital Education," *Proceedings of the European Symposium on Intelligent Technologies, Hybrid Systems and Their Implementation on Smart Adaptive Systems*, Tenerife, Spain, December 2001.
- **Robert F. Blanks**, "Professor/Coach; Gatekeeper/ Entertainer: How Can An Engineering Professor Today Balance These Roles in An Engineering Undergraduate Classroom?" *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001. (Abstract)
- John P. Butas, Claudia M. Meyer, **Louis M. Santi**, and T. Shane Sowers, "Rocket Engine Health Monitoring Using a Model-Based Approach," *Proceedings of the 37th AIAA/ ASME/SAE/ASEE Joint Propulsion Conference*, Salt Lake City, Utah, June 2001.
- **Carl Hardeman**, "User Requirements Impact on Long Term System Maintenance," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001. (Abstract)
- **Neal F. Jackson**, "Application of Microsoft (MS) Excel to Optimization Problems," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001.
- **Neal F. Jackson** and Susan Magun-Jackson, "Using a Neural Network to Assess a Master of Engineering Management Program," *Proceedings of the 2001 National Conference of the American Society for Engineering Management*, Huntsville, AL, October 2001.
- **Joe C. Kastner**, "The Use of Qualitative Case Study Methods to Establish the Potential of Extended Graduate Engineering Programs," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001. (Abstract)
- **Siripong Malasri**, "Integrating Distance Education Technology with Traditional Face-to-Face Instruction," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001.
- Claire Nash, **Judy Ramage**, and **Howard Lawrence**, "SFAS 106: Its Effect on Retiree Medical Plans," *Journal of Accounting & Finance Research*, Vol. 9, No. 6, pp. 61-68, 2001.
- **Judy Ramage** and James Tansey, "Increasing the Comparative Value of Cash Flow Statements," *Journal of Accounting & Finance Research*, Vol. 9, No. 3, pp. 84-91, 2001.
- **Asit Ray**, "Enhancement of Undergraduate Materials Education through Research and Industry-Academic Interactions," *Proceedings of the Materials Research Society*

Symposium, Vol. 684E, San Francisco, CA, April 2001.

- **Asit K. Ray, Denise T. Roberts, and Y. Zhou**, "Teaching Packaging At Christian Brothers University," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001.
- Christine Roueche and **Juan Carlos Olabe**, "Engineering Distance Education Courses Uniting Europe and the United States," *Proceedings of the 2001 International Conference on Engineering Education*, Oslo, Norway, August 6-10, 2001.
- Jy-Gau Sah and **L. Yu Lin**, "Electrokinetic Remediation on Cadmium (CD) Spiked Soils," *Proceedings of the 3rd International Symposium and Status Report on Electrokinetic Remediation EREM*, Karlsruhe, Germany, April 18-20, 2001.



- David Schaeffgen and **Siripong Malasri**, "Application of Genetic Algorithm Techniques in Solid Waste Route Optimization - A Java Implementation," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001. (Abstract)
- **John Ventura**, "Integration of Simulator Programs into Web-based Curriculum," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001.
- **John Ventura**, "Project in Seminar in Online Learning Environments: Models for Online Learning at Christian Brothers University," *Proceedings of the MAESC 2001 Conference*, Memphis, TN, May 2001.