

Christian Brothers University

SCHOOL OF ENGINEERING



Chemical



Civil



Electrical



Mechanical



Graduate Engineering

Engineering Newsletters

October 2004

NEW LAB EQUIPMENT HIGHLIGHT

The ROMI M17 Combination Lathe was installed and ready for use in June 2004. It is housed in the Development Shop/Manufacturing Lab in Saint Benilde Hall. It was purchased from the \$3M grant from the Assisi Foundation.

The ROMI M17 combination lathe with a swing of 16.9" and a distance between centers of 43.46" combines high performance turning and large machining capacity. It features a GE Fanuc 21i-T controller with a 10.4" color LCD and full keyboard, which conveniently swivels for ease of operation. Depending on the level of skill of the operator, it provides Manual Cutting, Guidance Single Cutting, Guidance Cycle Cutting, and G code Programming. This 2-axle combination lathe with an 8-station automatic turret enhances the existing manufacturing capabilities in the Manufacturing Laboratory. It supports all levels of mechanical engineering students for their projects. All mechanical engineering students are required to take the Manufacturing Processes course during their sophomore year, which focuses on hands-on experiences in traditional and CNC machining.



CONSTRUCTION MANAGEMENT CERTIFICATE

The Department of Civil & Environmental Engineering at Christian Brothers University is pleased to announce a new certificate on construction management. It is open to current students as well as practitioners.

The Construction Management Certificate is designed for individuals who would like to possess the proper skills to succeed in the construction profession. The curriculum is designed to prepare individuals for the art of achieving maximum profits through the effective use of human resources, equipment, materials and financial resources to complete a construction project on time and to the satisfaction of the owner. Individuals completing the certificate will have an understanding of management's point of view in the construction industry. If you want to improve your construction management skills, meet your PE's continuing education requirement, or to expand your career possibilities, this certificate might be for you! Call Christian Brothers University School of Engineering at (901) 321-3405 for more information.



The certificate requirements include:

- CE 314 Engineering Economy (3 crs.)
- Electives (6 crs.) Select two courses from CE 345 (Planning and Scheduling), CE 350 (Construction Estimating and Cost Control), CE 420 (Contracts and Specifications), and CE 425 (Heavy Construction Equipment and Methods).
- Project or Internship (3 crs.) For more information, contact Mr. Gene

McGinnis at gmcginni@cbu.edu or check the certificate web site at: http://www.cbu.edu/engineering/cm_certificate.html.

ETHICS SEMINAR

Dr. Fred Terry(ECE) will be offering an ethics seminar entitled "Non-Trivial Moral Problem Solving Solving the Ethical Quandary" on Wednesday, November 10, 2004, 9:45 a.m. 1:00 p.m. at EnSafe, Inc. (5724 Summer Trees Drive, Memphis, TN). This 2-PDH seminar is arranged by the Memphis Chapter of Tennessee Society of Professional Engineers. BBQ lunch is included in the registration fee (\$50 for TSPE member and \$75 for others). For more information, contact **Tim Herndon**, P.E., (CE'80) at (901) 371-0150 or tjherndo@bellsouth.net.

QUALITY SURVEY

Smith and Nephew Orthopaedics and Christian Brothers University are partnering to develop a graduate-level course of study focused in the area of Quality, as part of CBU's Master of Engineering Management (MEM) Program. This course of study will be available to anyone who wants an in-depth understanding of the importance and impact of quality in today's world. Upon completion, students will receive a Quality Management Certificate from CBU. These courses will apply toward an MEM degree for those students interested in furthering their education.

Let us know if you are interested (or not) in the opportunity to take graduate courses in Quality by completing our on-line survey at: <http://qualitysurvey.smithnephew.com>. It only takes a few minutes. Thank you for your participation.

Please contact **Susan Bell** (Susan.Bell@smithnephew.com) or **Dr. Neal Jackson** (njackson@cbu.edu) if you would like more information.

ALUMNI NEWS

Andrew Gentiluomo (MEM'99) and his family are happy to announce the arrival of a new son, Christopher Andrew, born September 28th. Andrew and his wife, Elizabeth, and three children continue to reside in Roanoke, VA where Andrew is VP of Product Development & International Business at The Egg Factory, a technology and business development company.

Tequilla Clayton (ECE'04) was married to Chansen Keith Hurt this past July 2004. She is a Power System Electrical Engineer with Tennessee Valley Authority (TVA) in Chattanooga, TN. She works with the Operational Analysis group, which is part of Electric System Operations. Her group is responsible for NERC performance management, developing generation portfolios, implementing procedures to cost real-time products and communicating real-time

pricing. Before working at TVA Tequilla worked as an intern with Memphis Light, Gas and Water for her senior project "Network Protector Monitoring System for the Downtown Memphis Electric Network." She said recently, "I am really glad that I took the elective power courses at Christian Brothers because they helped me in the analysis part of my senior project, and now, with my daily responsibilities in the system analysis profession." While at CBU, she also interned with Cummins, Inc. and worked part-time at Federal Express. Throughout her college years she worked with the great, late Brother Edward Doody, in the CBU Grant Office as the Chautauqua Coordinator for the 2000-2004 summer courses. While at CBU, some recognitions she received were Dean's List, Outstanding School of Engineering Graduate Award, Brother Philip Morgan Electrical Engineering Design Award, Featured Electrical Engineering Student, 1st Place Winner 2004 IEEE Southeast Con Region 3 Paper Competition, Who's Who Among America's Universities and Colleges, Computer Science Mathematics and Engineering Scholarship, and Christian Brothers Lasallian Academic Scholarship

Mr. Alexander Lostocco (ME'69) received Distinguished Alumnus Award on October 3rd. Since graduating from CBU, Mr. Lostocco has become an author, entrepreneur, business and civic leader. He also earned an MBA from the University of South Carolina. He owned an Atlanta-based Mmantec, a mechanical, electrical, and facility management company with major contracts that included Delta Airlines, FedEx, U.S. Coast Guard. His firm received The Gazelle Award in 1997 as the fastest growing company in Atlanta. Currently, he serves as President of Internships for America, Inc., a company that helps U.S. companies interested in developing internship programs and with internationals interested in pursuing an internship in the U.S. The firm has more than 25 international partners worldwide. His book entitled "U. S. Internships for International Students and Young Professionals" is regarded as the defining guide and manual for international internship program development. He has served on the CBU Board of Trustees, is an active member of the Atlanta Chamber of Commerce, and attends Christ the King Parish in Atlanta.



Mr. Alexander Lostocco (ME'69)

FACULTY/STAFF NEWS

Bob Moats (Engineering Mechanical Technician) spent a week at the Boy Scout Summer Camp at Kia Kima, AR. He earned the BSA Lifeguard Certificate. He also attended a welding class at Southwest Tennessee Community College during the summer and is taking a machine technology class at the college this semester.

On September 29th, the faculty of chemical & biochemical engineering department, **Drs. Ali Pourhashemi, Randel Price, and Asit Ray** took several ChE seniors and juniors to visit a small-scale and skid mounted biodiesel production plant. The compact plant has been designed and pre-manufactured by the Lurgi-PSI, a full service engineering design and construction firm. This small-scale plant is capable of producing about 2.5 MM gal/yr of methyl Ester, used as biodiesel fuel from edible oils and fats - vegetable and animal. The tour took about 1 & 1/2 hours and the guides were Mr. Wayne Schulenburg, senior project engineer Process/Instrumentation, Mr. Hamid Naderi, Principle engineer of Civil & Structure, and Mr. Ray Bufkin, project foreman from Lurgi-PSI.



ChE Field Trip

Dr. Juan Carlos Olabe (ECE) was the invited speaker at the inaugural Colloquium of Manhattan College (NY) with the talk "Towards a Global Lasallian University System." Dr. Olabe worked during the last week of September with faculty and IT personnel of Manhattan College to install and test the infrastructure for the creation and delivery of online courses and programs. This work is part of the first phase to provide 26 Lasallian universities around the world the technology to create online courses and programs. Dr. Olabe will be visiting these universities during the following months. The objective of the first phase of this project is to use the Internet and online education to share resources and increase quality and enrollment. The long-range goal is to establish a worldwide Lasallian University, where all Lasallian institutions offer and share online courses and programs.

Dr. Paul Shiue (ME) spent this past summer at Marshall Space Flight Center in Huntsville, AL. Two ME majors, **Brian DeJean** and **Jeffrey King**, also assisted Dr. Shiue in the research project entitled "Integration of Launch Vehicle Simulation/Analysis Tools and Lunar Cargo Lander Design." The work resulted in two papers presented at the Huntsville Simulation Conference on October 19-21, 2004.

Dr. Fred Terry (ECE) received the Brother Lawrence Egbert Distinguished Service Award on October 3rd. He has been with CBU for 35 years with 20 years as dean of engineering. During his tenure as dean, he organized one of the first pre-college programs for minorities and women interested in engineering in the state of Tennessee, which was funded in part through a grant from the United States Office of

Education Title 3 and partly by gifts from the engineering community in Memphis. Most notably, while head of the electrical engineering program, he obtained the first ECPD (later ABET) accreditation for CBU's electrical engineering program, and later, the civil and chemical engineering programs while division chair. As a member of the National Society of Professional Engineers, he has held positions locally including Scholarship Chairman, Chapter Director, and Chairman of the State Ethics Committee all of which help to increase awareness of CBU's engineering program. Dr. Terry has also been involved with GE Electronics Laboratory of Syracuse, UT Memphis, University of Virgin Islands, and Federal Emergency Management Agency. During his time as visiting professor of engineering at the University of the Virgin Islands, he organized the first Engineers' Week Celebration and was instrumental in organizing student volunteers to assist FEMA in an island-wide rebuilding effort following hurricane Marilyn in 1996. The National Council of Christians and Jews, Memphis chapter, honored him with the Community Service Award in 1988. Other volunteer activities include time spent as a volunteer for the West Tennessee State Prison, six years as a volunteer at the Suicide and Crisis Intervention Center, and numerous positions within his church, Balmoral Presbyterian.



Dr. Fred Terry