

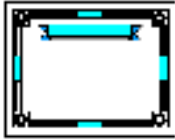
# School of Engineering

CHRISTIAN BROTHERS UNIVERSITY

## News - March 2001

### STUDENT NEWS

Congratulations to **Cassandra M. Dillon** (MEM) for her recent recognition by the local chapter of the National Society of Black Engineers (NSBE) as its 2001 Featured Engineer during the Engineers Week last February. Cassandra earned her B.S. in Industrial Engineering from Louisiana State University and her M. S. in Risk Control/Safety Engineering from the University of Wisconsin (Stout). She plans to finish the Master's of Engineering Management Program at CBU this coming May. Currently, Cassandra is Project Engineer at Federal Express Corporation. She coordinates and implements special projects and tasks throughout the Southern region. Her work helps her company to improve productivity, service, and cost performance in all areas of station operations. Cassandra has received several honors including Kaiser Scholarship, Herbert Lehman Education Fund Award, and American Legion Award. She is a member of American Society of Safety Engineers, American Conference of Governmental Industrial Hygienist, Institute of Industrial Engineers, Society of Women Engineers, Big Brothers Big Sisters of Memphis, and National Society of Black Engineers.



### ALUMNI NEWS

**Jeff Collins**, P.E., (CE '90) recently moved to Richmond, VA. He has accepted an engineering position with American Heavy Rigging Co. Before moving to Richmond, Jeff was an engineer with Barnhart Crane & Rigging Co. in Memphis.

**Carol Jones**, P.E., (CE '82, MEM '93)) was recently promoted to Senior Project Manager at the Memphis District of the US Army Corp of Engineers. Her current projects and studies are the Memphis Metro Study, Wolf River Ecosystem Restoration Project, Nonconnah Creek Project, Memphis Harbor Reevaluation Study, Horn Lake Creek Study, Hickman Bluff Project, West TN Tributaries Project, and West Kentucky Tributaries Project. The total budget for Fiscal Year 2001 is approximately \$3.3 million. When we asked her about CBU education, Carol said, "*My undergraduate BSCE degree from CBU definitely prepared me to be a problem solver.*"

*My Masters degree in Engineering Management prepared me to be a better Technical Manager in the Engineering Division and now Project Manager. It enhanced my strategic thinking ability and allowed me to see how the business management and engineering technical fields interact together. I also like the fact that it is not a large university, therefore, if you need assistance in a class you can get help from the professors more often than in a large university."*

## FACULTY NEWS

Welcome to CBU Engineering! **Barbara Meyer** has accepted the position of Administrative Coordinator in the Office of Graduate Engineering. Her experience includes computer instructor, project coordinator, and general manager/owner of a small business. She has working knowledge of a variety of software products (Microsoft Office User Specialist Certification); experience in web development and administration; and demonstrated planning and organizing skills. Barbara brings to this new position the experience and enthusiasm needed to make a significant contribution to the success and growth of the MEM program.



*Dr. Neal Jackson*

**Dr. Neal Jackson**, Director of Graduate Engineering, made a presentation at the American Society for Quality (ASQ) monthly dinner meeting held on February 20, 2001. He spoke about CBU's involvement with Greater Memphis Association for Quality (GMAQ). CBU is active in the participation of the award process provided by GMAQ. He also mentioned how the quality concepts are integrated into CBU's curriculum. He spoke about the proposed graduate certification in Quality Systems. CBU is a sustaining member of the American Society for Quality. Dr. Jackson also attended the West Tennessee Power Engineering Society meeting on February 27, 2001, held at Jackson State Community College in Jackson. In his presentation he mentioned the ongoing cooperation with JSCC, to expand the MEM program to Jackson, TN. The classrooms, computer/internet access, office space and library support will be provided by JSCC.



*John Ventura, P.E.*

**Mrs. Diana Dluhos**, Engineering Dean Administrative Assistant, attended a "Grants Management" workshop on March 2, 2001, at the Grant Center of Memphis. She is assisting engineering faculty in managing their grants.

**Mr. John Ventura** (ECE Department) and **Dr. Ali Pourhashemi** (ChE Department) attended a workshop entitled "Developing a Convincing Needs Assessment/Problem Statement" at Lindenwood Church on Friday, March 9, 2001. The Grant Center of Memphis arranged the workshop.

## FORENSIC ENGINEERING SEMINAR

CBU Engineering is hosting a four-hour professional development seminar entitled "**Engineers and Managers Can Learn from a Forensic Engineer: Practices That will help Them Do Better Work and Stay Out of Trouble**" on Friday, April 20, 2001, 8:00 a.m. - 12:00 noon, Thomas Center Conference Room, CBU. The seminar is cosponsored by the Memphis Chapter of Tennessee Society of Professional Engineers, the West TN Branch of American Society of Civil Engineers, and the Engineers' Club of Memphis, Inc. The seminar instructor is **Mr. Loyal Murphy, III**, P.E., R.L.S.



Based on his experience over three decades of civil and structural engineering design and about a decade of forensic engineering, Mr. Murphy has observed patterns of problems in the business and physical systems with which we work. The subjects to be discussed in this seminar will include:

- The business environment
- Business practices that lead to physical problems and problems for engineers
- Common problems with common structures (with analogies to other technical disciplines)
- How to make your workplace and designs safer (related to stairs and ramps)
- What forensic engineers do and how that practice differs from a design engineering practice
- Input from participants

The presentation for this seminar will be an updated version of material presented to the Engineers Club in three one-hour Professional Development Classes and TSPE in two four-hour seminars in Nashville and Knoxville about two years ago. One attendee at the past seminar said he made a list of seven things to start doing differently as soon as he got back to his office!

Loyal Murphy, III, earned his undergraduate degree in civil engineering from Vanderbilt University and Master's degree in industrial systems analysis from Memphis State University. He is a registered professional engineer in Tennessee, Arkansas, Mississippi, and several other states. He was past president of the Tennessee Society of Professional Engineers, served on the Board of Directors of the National Society of Professional Engineers, and was past president of the National Academy of Forensic Engineers. Mr. Murphy worked for a large consulting engineering company for over eight years and has had his own practice for over 30 years. His primary practice includes engineering investigation and forensic engineering, engineering design of building structures, and land developments.

### Registration Fees:

- \$100/person if we receive your registration on or before 04/06/01.
- \$125/person if we receive your registration between 04/06/01 and 04/13/01

CBU Alumni get a 20% discount on the registration fees.

No registration accepted after April 13, 2001.

Mail a letter with your name and contact information with check to:

Christian Brothers University  
Forensic Engineering Seminar - April 20, 01  
School of Engineering  
650 East Parkway South  
Memphis, TN 38104

For more information, please call Dr. Siripong Malasri at (901) 321-3419 or email at [pong@cbu.edu](mailto:pong@cbu.edu).

### **MAESC 2001 PRELIMINARY PROGRAM**

The 3rd Annual Memphis Area Engineering and Science Conference (MAESC 2001) has been scheduled on Friday, May 11, 2001, on CBU campus. There will be presentations on various topics in science and engineering at the conference. Below is a tentative list of presentations.

- Packaging for the Express Distribution Environment
- The Importance of Correct and Effective Color Use in Brand Packaging Design
- Teaching Packaging Engineering at Christian Brothers University
- Integrating Distance Education Technology with Traditional Face-to-Face Instruction
- Bluetooth Technology: The Support of Ubiquitous Information Access and Delivery
- Solid-State Chemical Sensing Arrays Using Calixarene/Polyaniline Selective Layers
- Development of an Automated 3-D Surface Model Creation Module for Laser Scanned Point Data
- Seismic Instrumentation of the I-40 Mississippi River Bridge in Memphis, Tennessee
- Damaging Earthquakes in Mid-America: Not just 1811-1812
- Design Earthquakes for Performance Based Design of Buildings in Shelby County, Tennessee
- Assessment of the National Institute of Building Sciences 1997 Edition NEHRP Recommended Provisions for the New Madrid Seismic Zone: An

#### Alternative View

- User Requirements Impact on Long Term Computer System Maintenance
- Building Balanced Scorecard Strategy Maps
- Application MS Excel to Optimization Problems
- The Use of Qualitative Case Study Methods to Establish the Potential of Extended Graduate Engineering Programs
- Effect of Hot Water Environment on the Mechanical Properties of Pultruded Polymer Composites
- Experimental Examination of Different Combinations of Hotoinitiated Resins Used in Filament Winding
- Effect of Fillers on the Processing and Properties of Pultruded Composites
- Biosensors as an Emerging Tool in Bioanalytical Research: A Kinetic Analysis of the Analyte-Receptor Interactions in Biosensors
- Implementation of an Automated 3-D Surface Model Creation Module for Laser Scanned Point Data
- Radiation and Coupling Effects on Open Integrated Waveguides in Connection with the Singularity Theory
- Modeling Oxidation of Carbon Sheet
- Integration of Simulator Programs into Web-based Curriculum
- Models for Online Learning at Christian Brothers University
- Professor/Coach - Gatekeeper/Entertainer: How Can an Engineering Professor Today Balance These Roles in an Engineering Undergraduate Classroom?
- Field Survey on Physical Discomforts Among VDT Users Caused by VDT-Related Factors
- The Use of Statistical Process Control Techniques to Characterize the Viscosities of Fluids in Long-Term Care Facilities
- Evaluation of Soil Moisture Sensors
- 100 Erosion Control Plan Reviews - Lessons Learned
- Using Modern Materials to Teach Chemical Concepts
- Comparative Analysis between Conical and Profiled Horn Antennas
- Attractive Features of 2D Analysis for Some 3D Problems of Microwave Circuits and Antennas
- Bandwidth Enhancement of Conical Shaped Dielectric Resonator Antennas
- An Evaluation of Hybridization Kinetics in Biosensors Using a Single-Fractal Analysis
- Green's Function Approach for Waveguide and Antenna Problems of Applied Electromagnetics

Take an advantage of early registration at a discount rate by sending a check of \$180/person by April 20, 2001. After this date, the registration fee will be \$200/person. CBU Alumni get a 20% discount on the registration fees. Updates and registration form can be found at the conference web site (<http://www.cbu.edu/engineering/maesc>).