

THE CORNERSTONE

News from the Department of Civil and Environmental Engineering at the University of Tennessee, Knoxville

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CEE Department Leading the Way in Globalization Opportunities

The University of Tennessee has embarked on an ambitious plan to help students gain the international and intercultural knowledge they need to succeed in today's world. The initiative, "Ready for the World," is part of a long-range plan to transform the campus into a culture of diversity that best prepares students for working and competing in the 21st century.

"Ready for the World" calls for internationalizing the curriculum, increasing global competency of faculty and staff and focusing on intercultural issues relevant to the university. Recruiting international students, increasing

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the number of students who travel abroad and a change in programming, opportunities and the overall feel of campus life are just some of the goals for this initiative.

Today's world changes every day in complexity. The initiative is not just a lofty academic goal; it is necessary in order to provide students with education and experiences needed to thrive in a global society.

UT is at the center of Tennessee's future and works toward creating a greater understanding of the role UT plays in helping the state and its citizens thrive in local, regional and global environments.

The Department of Civil and Environmental Engineering is ahead of the curve in providing students and faculty with the opportunity to experience other cultures. Through collaborations with universities across the globe, we have embarked on a global education initiative.

Our goal: to dramatically alter what it means to be educated at UT.

Dr. Joshua Fu is part of the US-China Air Quality Management Collaboration Research project—air quality modeling assessment for the 2008 Olympic Games in Beijing and 2010 World EXPO in Shanghai.



Drs. Eric Drumm, Baoshan Huang and Gregory Reed have established a research collaboration with Tongji University in Shanghai, China.

Dr. Sandeep Agnihotri has an ongoing collaboration with Professor Paulo Mota at the Universidade de Nova Lisboa in Lisbon, Portugal.



Dr. Arun Chatterjee has a research collaboration with Chulalongkorn University in Bangkok, Thailand.



Dr. Gregory Reed has teaching and research collaborations with the University of Santiago and Catholic University, Temuco in Chile.



Dr. John Schwartz and students are working on clean water for rural Dominican Republic.



Dr. Martin Clauser spent his sabbatical at the Research Center in Juelich, Germany, which is the German equivalent of ORNL.



Dr. Carlos Felipe Loureiro, former student of **Dr. Arun Chatterjee**, is head of the transportation program at the Federal University in Fortaleza, Brazil.



READYFORTHEWORLD

UT Hosting 2007 ASCE Regional Conference

The UT ASCE student chapter will host the 2007 ASCE Southeast Regional Conference March 29-31 in Knoxville, Tenn. Over 600 students from 23 Southeastern institutions are expected to converge in Knoxville to participate in a variety of civil and environmental engineering events.



For over 20 years, the conference has rotated among universities in Tennessee, Florida, Georgia and Alabama, and the 2007 edition will be UT's third time as the host university. UT has traditionally competed very well, with recent first and second place finishes.

This year's conference will include three national events – concrete canoe, steel bridge and geotechnical – as well as concrete strength, environmental, model bridge, plan reading, T-shirt, technical paper, transportation, surveying and a mystery competition.

Another popular tradition at the Southeast conferences is the job fair, which will take place Friday, March 30 in Thompson-Boling Arena. To learn how your firm can participate, please email the event coordinators at asceconf2007@utk.edu.

The conference will conclude Saturday evening, March 31 with an awards banquet at the Knoxville Convention Center.

"We are excited and honored to host the conference this year and look forward to welcoming the other student chapters to UT and East Tennessee," said Dr. Eric Drumm, ASCE's faculty advisor.

The regional conference is organized and coordinated by students and requires a significant amount of time and financial commitment. If you can provide support, in-kind services or would be interested in judging or working an event, please contact event coordinators at asceconf2007@utk.edu to be put on the email list.

For more information about the 2007 ASCE Southeast Regional Conference, visit <http://conference2007.utkasce.org>.

Roberts Named New CEE Teaching Associate



Ms. Roberts

Nancy Roberts has joined the department as a Teaching Associate. Nancy has a BSCE and MSCE from the University of Louisville and is a licensed Professional Engineer with 20 years practitioner experience. She has responsibility for all the civil engineering testing laboratory functions in support of both the undergraduate and graduate programs.

ITE Student Chapter Wins Service Award

The UT College of Engineering's Institute of Transportation Engineers (ITE) Student Chapter recently received the Robert E. Stammer Jr. Student Chapter award at the 2006 ITE Scholarship Meeting. This award is given for outstanding service to the ITE Tennessee Section and the transportation engineering profession. In addition, **Shaun Quayle** received the outstanding paper award for 2006 along with a \$1,500 scholarship. Another \$1,500 scholarship went to graduate student **Manoel Castro-Neto**.

CEE Department Honors and Awards



▲ Mr. Alan Sparkman (*right*), Director of the Tennessee Concrete Association (TCA), presents a \$2,000 check to CEE representative Dr. Edwin Burdette (*left*) to fund the Concrete Technology Graduate Scholarship. The first recipient of the scholarship is Ph.D. student **Xiang Shu** (*second from left*), who has published two journal papers based on his graduate studies. Also pictured is Dr. Baoshan Huang.



▲ Dean Way Kuo (*left*) presents the College of Engineering Teaching Fellow Award to **Dr. Edwin Burdette** (*right*) at the COE Honors Banquet April 11, 2006. Burdette was cited for his exceptional record of graduate and undergraduate teaching and strong performance in teaching-related service activities.



▲ **Dr. Chris Cox** (*left*) accepts the 2006 Research Fellow Award from Dean Way Kuo (*right*) in recognition of his outstanding research activities and contributions to the overall mission of the college.



▲ **Dr. Dayakar Penumadu** (*right*) receives The Moses E. and Mayme Brooks Distinguished Professor Award from Dean Way Kuo (*left*) for demonstrating effectiveness in teaching and gaining distinction in engineering practice.



▲ Dean Way Kuo (*left*) presents the Leon and Nancy Cole Superior Teaching Award to **Dr. Richard Bennett** (*right*) for demonstrating outstanding teaching skills, clear communication, depth of subject knowledge and the ability to motivate through effective advising and counseling.



▲ CEE honorees at the 2005-2006 COE Honors Banquet included (*left to right*): **Joseph Barbeault** and **Michael Massey**, John Callaway Academic Achievement Awards; **Dr. John Schwartz**, Teaching Recognition Award; **Dr. Dayakar Penumadu**, Scholar Recognition Award; **Dr. Randall Gentry**, Service Recognition Award; **Lisa Smith**, Staff Recognition Award; and presenters **Dr. Eric Drumm** and **Wesley MacDonald**.

UT Team Receives TRB Exceptional Paper Award

Manoel Castro-Neto, a civil engineering Ph.D. student, and CEE Professors **Dr. Tom Urbanik** and **Dr. Lee Han** were awarded an Exceptional Paper Award at the 85th Transportation Research Board (TRB) Annual Meeting, the largest international transportation engineering conference in the world. Every year several thousand papers are submitted to the conference for publication and presentation. Several UT faculty from civil, geotechnical, pavement, materials, environmental and other engineering disciplines participate in the conference each year.

Castro-Neto received the prestigious Dwight David Eisenhower Graduate Fellowship, awarded by U.S. Department of Transportation's National Highway Institute, which covers tuition, stipend and travel expenses for three full years during his study with Dr. Han.

CEE graduate students **Xiang Shu** and **Austin Bateman** were also awarded 2006 Dwight David Eisenhower Graduate Fellowships of \$6,500 and a one-time expenditure for attending the Transportation Research Board's annual meeting.

ASCE Scholarship Golf Tournament Raises \$5,500

The Knoxville Branch of ASCE and the Department of Civil and Environmental Engineering recently hosted their Ninth Annual Scholarship Golf Tournament at Centennial Golf Club in Oak Ridge. About 116 golfers were on hand and raised over \$5,500 for the ASCE Student Scholarship Fund.

Guthrie Named Outstanding CEE Alumnus For 2006

The 2006 Outstanding Civil Engineering Alumnus Award was presented at the annual awards banquet to **Ronald D. Gurthrie**, who received his B.S. and M.S. degrees in civil engineering from UT in 1964 and 1973, respectively.

He had a long and productive career at TVA as a structural engineer and manager in the Knoxville office and at Brown's Ferry, and completed his TVA career with a one-year assignment as Project Services Engineer for the Sequoyah Nuclear Plant. He retired from TVA in 1988 and began a new career with Patel Engineers, which became EGS Corporation, purchased by SAIC in 1995.

At the end of his career as Assistant Vice President and Chief Engineer with SAIC, Mr. Gurthrie became Deputy Task Manager for the Seversk Plutonium Elimination Project (SPPEP) at the National Energy Technology Laboratory (NETL) in Pittsburgh. At the end of December 2003, Ron retired (again) from SAIC and, since then, has been Senior Engineering and Construction Advisor and Assistant to the Federal Project Director for the SPPEP at DOE Germantown Headquarters.



Ronald D. Gurthrie (center) accepts the 2006 Outstanding CEE Alumnus Awards from **Dr. Eric Drumm** (left) and **Dr. Ed Burdette** (right).

Ron's work with SPPEP is a joint endeavor between the United States and Russia to terminate the production of weapons-grade plutonium. Inspired by the desire to avoid another catastrophe like Chernobyl, this project is directed toward the replacement of the Chernobyl-like reactors currently in use at Seversk and Zheleznogorsk with alternate, safer means of generating electric power. Mr. Gurthrie sees his participation in this effort as an opportunity to "make a difference" and to make a meaningful contribution toward assuring a safer world for future generations.

CEE Scholarships Awarded for 2006–2007

Tennessee Road Builders Scholarship Awardees

Jason Alexander Baert
Leslie Brack Brown
Cybil Leeann Foster
William Cortney Gibbons
Michael Dominic Hogan
Shannon D. McGhinnis
Samuel Elliott Moore
Matthew B. Regenold
John Scott Stanley

Bill Ratliff Scholarship

Joshua David Kerr

C. Bryan Blalock Memorial Scholarship

Douglas Glenn Tarwater

J. W. Lonas Memorial Scholarship

Tyler Cade Williams

Jere B. Ford Scholarship

Jeremy Lane Nafziger
Ashley Renee Nelson
Sharion Simone Smith

Emmett W. and Lucille K. Dunn Scholarship

Jessica Charlsene Baxter

Sue Brown Scholarship

Kristen E. Davis

Gary and Nan Given Civil Engineering Scholarship

Nicole Emily Belanger
Elizabeth Eleanor Carls
Matthew Alan Goranson

John Callaway Scholarships

David Andrew Howe
Nathan Jeffrey Mills
Heather Michelle Burnett

Jack and Judy Humphreys Scholarship

Virginia Marie Bertalan
John David Coulter

John Milton Snoderly Scholarship

Richard Scott Warren
Alan Wade Grissom

Terry P. Scholes Scholarship Fund

Curtis Matthew Long

William and Pat Grecco Scholarship

Kevin Andrew Crumley
Jacquelyn Elaine McCurry

William W. Aydelott Memorial Scholarship

Kristina Novikova

Edwin G. and Patsy H. Burdette Graduate Fellowship

Austin Bateman
Sarah Janney
Ross Shaver

ASCE Student Chapter Scholarship

Sherry Ann Ault
Stephen Craig Horne

CEE Alumni Scholarship

Christopher Alan Fox
Joseph Malo
Matthew Daniel Redmon
Christopher Lee Slate
Jonathan Patrick Watson

Institute of Geotechnology Scholarship

Paul Steele

Concrete Technology Graduate Scholarship

Xiang Shu

ASCE Student Chapter Places Second at Regional Conference

The UT ASCE Student Chapter, led by President Adam Alexander and Conference Chair Sherry Ault, finished second place overall out of 23 participating schools at the 2006 ASCE Southeast Regional Student Conference in Gainesville, Fla. They earned points for each of the 14 events and were recognized with trophies for the following:

1st Place—Environmental

1st Place—Geotechnical

1st Place—Concrete Cylinder

2nd Place—Visual Display/Canned Goods Structure

4th Place—Steel Bridge

5th Place—Transportation

The following awards were also received:

Steel Bridge—1st Place Aesthetics

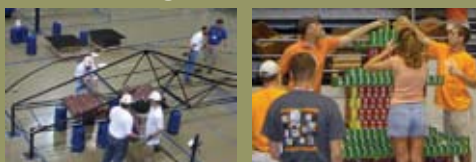
Steel Bridge—3rd Place Stiffness

Steel Bridge—3rd Place Construction speed

Steel Bridge—3rd Place Economy

Visual Display—Directors Award for the most cans used/donated in the Canned Goods Structure.

The National ASCE Committee on Student Activities awarded a Certificate of Commendation to the UT ASCE Student Chapter based on the chapter's 2005 activities. The certificate is awarded to the top 10 percent of student chapters in the country.



Members of the UT ASCE Student Chapter work on two of their award-winning projects: the Steel Bridge (left) and the Visual Display/Canned Goods Structure (right).

UT Signs Agreements with Tongji University in China

Recently while lecturing in Shanghai, China, Dr. Gregory Reed signed two special agreements: one between UT CEE and Tongji University's School of Civil Engineering and another with its School of Transportation Engineering. These agreements will expand the exchange of students, faculty and joint research projects between the two institutions.

The student exchange will begin in 2006 as UT students will travel to China to be the first team from the United States to compete in a student bridge competition on Chinese soil. In 2007, a student team from Tongji University will come to UT and be the first Chinese university to compete in the United States.

Dr. Baoshan Huang, an assistant professor in the UT CEE department, is already active with Tongji University, and one of their professors, Zugang Yao, will visit UT.

CEE Calendar of Events 2006 / 2007

2006

Engineers Day Oct. 24
Thanksgiving Nov. 23-24
Classes End Dec. 5
Fall Commencement Dec. 17

2007

Classes Begin Jan. 10
King Holiday Jan. 15
Spring Break Mar. 12-16
ASCE Student Conference ... Mar. 29-31
Spring Recess Day Apr. 6
Spring Honors Banquet Apr. 27
Classes End Apr. 27
Spring Commencement May 11
ASCE Golf Tournament July

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Inquiries concerning Title IX, Section 504, and the Americans with Disabilities Act of 1990 should be directed to the Office of Equity and Diversity; 1840 Melrose Avenue; The University of Tennessee; Knoxville, Tennessee 37996-0144; (865) 974-2498. Charges of violation of the above policy also should be directed to the Office of Equity and Diversity.

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