

# ENGINEERING MONTHLY NEWS

LOUISIANA STATE UNIVERSITY

COLLEGE OF ENGINEERING

May 2002

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## Faculty Promotions



**Wen J. Meng (ME)** has been promoted with tenure to the rank of Associate Professor.



**Jagannatham Ramanujam (ECE)** has been promoted from Associate Professor to Professor.

**Harris Wong (ME)**

has been promoted with tenure from Assistant Professor to Associate Professor.



**Elizabeth Podlaha (ChE)**

has been promoted with tenure from Assistant Professor to Associate Professor.

**John J. Sansalone (CEE)** has been promoted with tenure from Assistant Professor to Associate Professor.



## Hurricane Center Receives Grant

LSU Hurricane Center has received a grant of \$147,077 from Louisiana Sea Grant.



Researching "Satellite-based Remote Sensing of Flood Impacts for Improved Emergency Response and Recovery" will be conducted by **Marc Levitan (CEE)**, **Linbing Wang (CEE)** and **John Sansalone (CEE)**.



## Graduate Students Receive Special Recognition

The College of Engineering Exemplary Dissertation Award will be awarded to **Abdelqader M. Zamamiri (ChE)** and **Daniel U. Campos-Delgado (ECE)**.

Zamamiri worked with **Dr. Martin Hjortso (ChE)** and will receive recognition for his dissertation titled *Analysis and Mathematical Modeling of Autonomously Oscillating Yeast Cultures*.

Campos-Delgado, worked with **Dr. Kemin Zhou (ECE)** and will be recognized for his dissertation titled *Active Control of Thermo-Acoustical Instabilities*.

Recipients of these awards are selected by the College of Engineering Graduate Coordinators Council.

## 2002 Transportation Engineering Conference Pronounced a Success

More than 1,300 transportation professionals converged on Baton Rouge to attend the 2002 Louisiana Transportation Engineering Conference. Attendees from throughout Louisiana, 24 other states, and two Canadian provinces represented the public, private, and academic sectors of the transportation industry. The fifth meeting since its initiation as a biennial event in 1993, this year's two and a half-day conference was the largest and most successful conference yet.

The conference represents a premier tech transfer opportunity for the Louisiana Transportation Research Center which is charged with the accountability for planning, coordinating, and managing the conference. LTRC's Director, Joe Baker, credits the conference's success to the enormous partnering effort between LADOTD, LTRC staff, and friends in the entire transportation community.

"I can think of no other tech transfer activity having as great an impact on the entire industry as this conference," said Baker.

The conference provided a forum for transportation professionals to relate innovative technologies and to discuss transportation policy, practice, and problems. The program focused on a full complement of technical sessions which facilitated the exchange of new information and innovative technologies in the transportation industry, research results and techniques, or strategies developed. The 43 technical sessions offered areas of interest such as ITS, intermodal issues, highway materials, law and the engineer, changes to the LADOTD Standard Specifications, construction issues, and new design concepts. Attendees to the sessions could earn up to 15 professional development hours, which was attractive to engineering attendees.

The conference was well attended by university civil engineering staff and students who comprised about 4 percent of the attendees. There were 26 technical presentations made by 26 LTRC personnel or contract researchers for activities supported by LTRC: Dr. Louay Mohammad, "The Influence of Asphalt Tack Coat Materials on Interface Shear Strength" and "The Application of Minicone Penetration Technology in Pavement Design;" Brian Wolshon, "Hurricane Evacuation Planning;" Chester Wilmot, "Outsourcing;" Murad Abufarsakh, "Predicting Embankment Settlement with CPT;" Amtiva Roy, "Stabilization of a Reactive Aggregate Base by Blended Portland and Slag Cement;" and Richard Avent, "Heat Straightening."

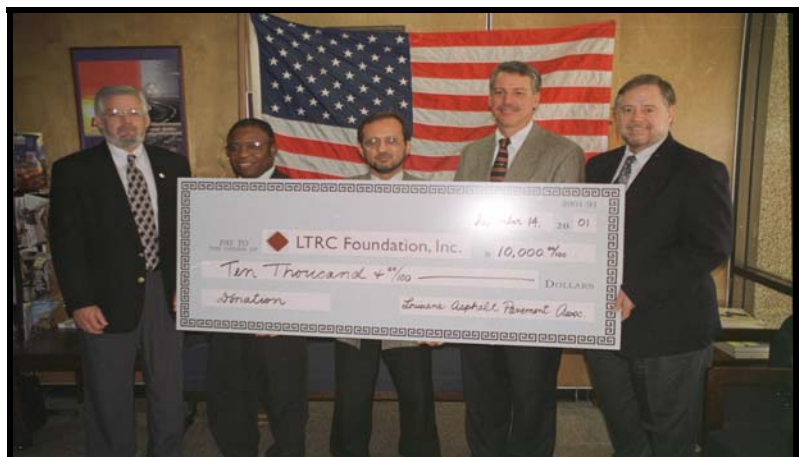
One of the conference highlights included a trade show which showcased new and innovative materials, equipment, and services presented by over 60 transportation-related consultants and vendors. The occasion also provided an opportunity for participants to network and discuss transportation issues and solutions.

With the success of each conference, the number of participants has steadily risen from nearly 700 in 1993 to over 1,400 attendees this year. This continued rate of growth represents a challenge for conference administrators in the planning and conducting this event in the future.

Baker expressed his appreciation for the leadership role that Kirt Clement, conference administrator, and other members of the transportation community played in this conference.

### LTRC & Louisiana Asphalt Pavement Association

A check for \$10,000 was presented to the LTRC Foundation from the Louisiana Asphalt Pavement Association in appreciation for the development and conduct of a series of Superpave training classes to our industry during the spring 2001 under the leadership of Dr. Mohammad. This initiative is an example of a desired partnership among academia, government and industry which will not only benefit the HMA industry by providing a trained work force in Superpave HMA technology, but also benefits the public sector at the federal, state and municipal levels.



(photo L to R) Joe T. Baker, Director LTRC, Pius J. Egbelu, Dean, College of Engineering, Louay N. Mohammad, Associate Professor, CEE and LTRC, Peter Wilson, Vice President, Barriere Construction, Don Weathers, Executive Director, Louisiana Asphalt Pavement Association.

## LSU Engineering Hall of Distinction Honors Three Inductees

The LSU Engineering Hall of Distinction proudly welcomes the three distinguished engineers who are to be inducted as members this year. **Mark R. & Carolyn Campbell Guidry** and **William H. Stone**.

Mark R. Guidry, chairman of the board, Mozzarella Fresca Corporation, received his Ph.D. from Iowa State University in 1965, M.S. from the University of Washington in 1961 and bachelor's from Louisiana State University in 1959, all in electrical engineering.

Carolyn Campbell Guidry, president & chairman, Guidry Family Foundation, earned her master's degree in computer engineering from San Jose State University in 1979 and bachelor's degree in electrical engineering from Louisiana State University in 1959.



William H. Stone, founder & president, Main Energy, Inc., graduated with his B.S. in petroleum engineering from Louisiana State University in 1966.

*(l-r) Dean Pius Egbelu with Mark Guidry, Carolyn Campbell Guidry, William Stone and Chancellor Mark Emmert at the Annual Awards Banquet in April.*

## LSU Students Win Awards in International Environmental Design Contest

Two environmental engineering student teams from LSU won several awards, including first and second place finishes in two categories, at the 12<sup>th</sup> annual International Environmental Design Contest held at New Mexico State University. The teams also won the Overall Award in the Waste Management Track, giving the students a total of \$6,000 for their efforts.

The contest played host to more than 350 students representing 25 universities from throughout the United States, India and Mexico. Sponsored by WERC: A Consortium for Environmental Education and Technology Development, the contest challenged teams to provide solutions to environmental problems that were submitted by private industry and government agencies. The students prepared papers made oral presentations and developed bench-scale demonstrations of their solutions in competition for cash awards and travel allowances exceeding \$55,000.

The representatives from LSU were: **Jonathan Fourrier**, Baton Rouge; **Loyd Bourgeois**, Baton Rouge; **Michael Thompson**, Lake Charles; **Jason Candella**, Opelousas; **Jude Mancuso**, Destrehan; **Julie Reed**, Port Barre; **Lacey Yesso**, Houma; **Sarah Goldsmith**, Baton Rouge; **Shana Kunefke**, Denham Springs; **Melanie Boudreaux**, Baton Rouge; and faculty advisor **David Constant**, professor of Civil and Environmental Engineering. This year's group, in LSU's fifth year of participation in the event, was sponsored by the Hazardous Substance Research Center/South and Southwest, a consortium of LSU, Rice, Ga Tech and Texas A&M, and the LSU Department of Civil and Environmental Engineering, was split into two teams.

One team's project was to develop and demonstrate a separation technology for treatment of explosive-contaminated soil in a safe and cost-effective manner. The other team developed and demonstrated a cost-effective method to remove uranium from drinking water. For both teams, their designs had to take into consideration the regulations around their proposals, legal issues, public participation and the overall cost to finance such an undertaking.

"These students are outstanding among their peers," said Abbas Ghassemi, executive director of WERC. "We hope that this experience will encourage them to continue their education in the environmental disciplines."

For more information, visit WERC at [www.werc.org](http://www.werc.org) or call 1-800-523-5996.

See photos of teams and exhibits on next page.



# Environmental Design Contest Photos



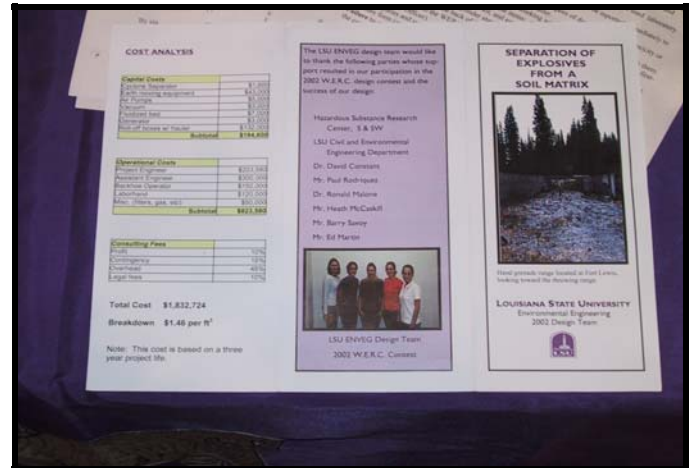
(l-r) Loyd Bourgeois, Jude Mancuso, Michael Thompson, Jonathan Fourrier and Jason Candella



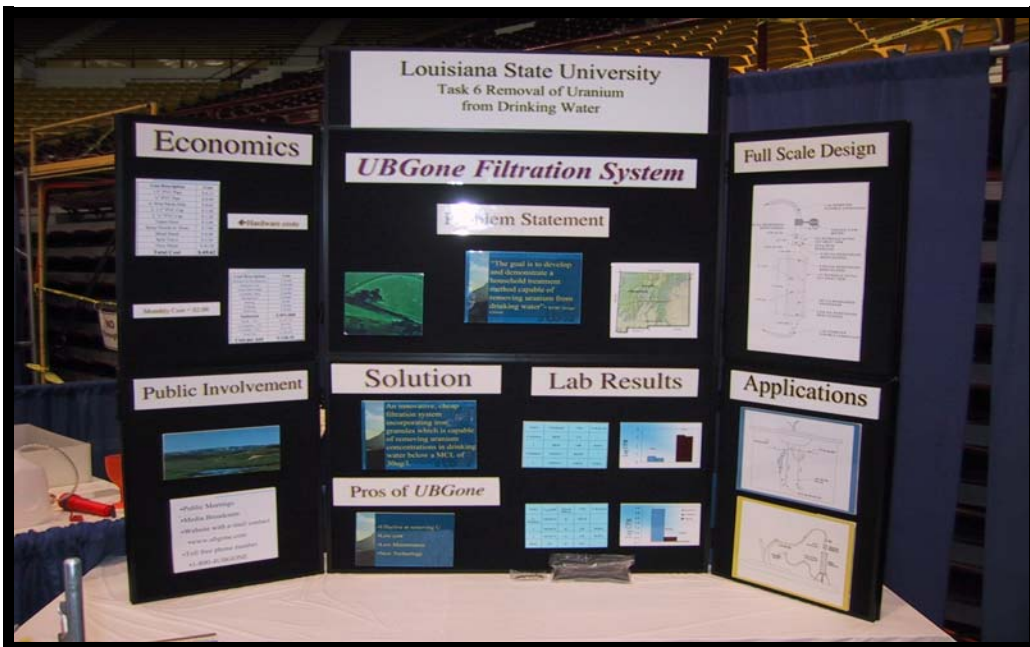
(l-r) Melanie Boudreaux, Julie Reed, Shana Kunefke, Sarah Goldsmith and Lacey Yesse



(l-r back row) Jude Mancuso, Jason Candella, Loyd Bourgeois, Michael Thompson, Jonathan Fourrier.  
(l-r front row) Shana Kunefke, Lacey Yesse, Sarah Goldsmith, Melanie Boudreaux and Julie Reed.



(above photo) Brochure for 2nd place solution.



(photo @ left) Poster presentation for winning 1st place solution.

## COE/LSU Visits COE/UNO

On April 17, representatives from the College of Engineering visited University of New Orleans (UNO) to confer with the faculty at UNO and visit their facilities. **Dean Pius Egbelu (COE)**, **Dr. Dante Fratta (CEE)**, **Dr. Bhaba Sarker (IMSE)**, **Dr. Fred Aghazadeh (IMSE)** and **Associate Dean Mehmet Tuma (COE)** visited with the goal of initiating contacts between the two faculties to spawn collaborative efforts in scholarly pursuits.

The delegation also visited the National Center for Advanced Manufacturing (a consortium lead by UNO consisting of Texas A&M University, Mississippi State University, Virginia Polytechnic Institute, and Tennessee Technological University) at the NASA Michoud Facility, the National Biodynamics Laboratory at Michoud Facility, the Edward G. Schlieder Urban Environmental Systems Center at UNO Research & Technology Park, and the Gulf Coast Region Maritime Technology Center at UNO Research & Technology Park.

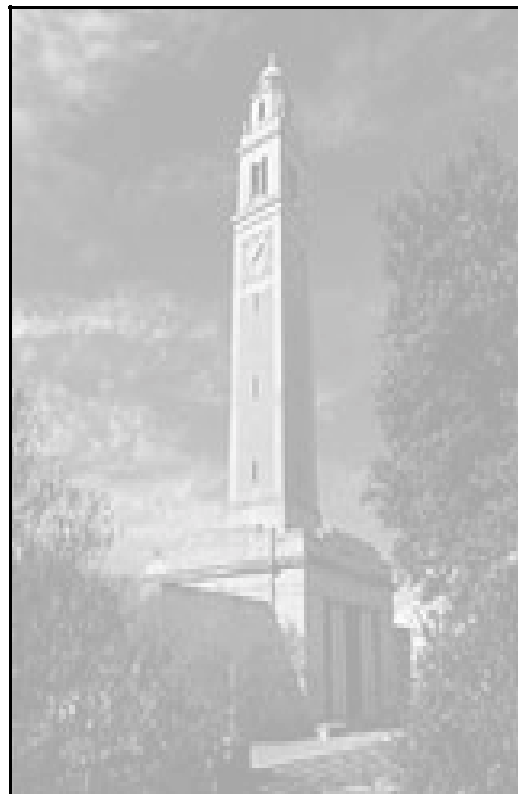
Indications exist that prove substantial opportunities for the faculties of COE/LSU and COE/UNO to collaborate effectively towards goals/projects of mutual national/international interest and reward.



## Important Dates

**Wednesday, May 22**—Open Forum with the Dean—3225 CEBA—noon to 1:30 pm. Please note this date was changed from May 23. Come, bring your lunch and take advantage of this last opportunity this semester to talk about issues concerning the College of Engineering.

**Friday, May 24**—11:30 am—Commencement at the Fieldhouse.



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