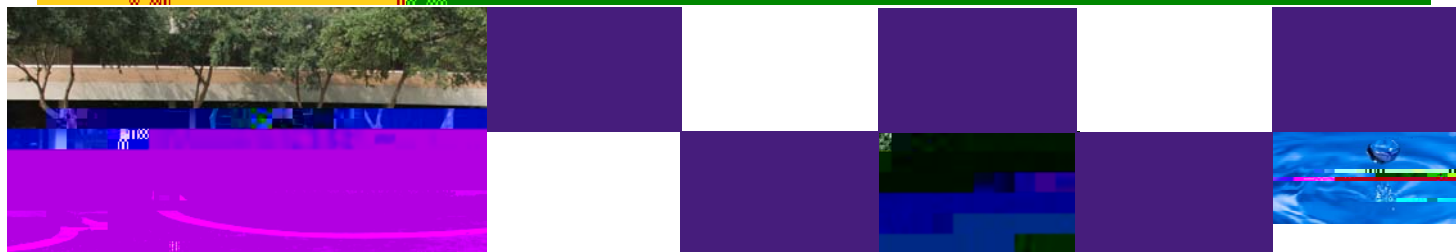
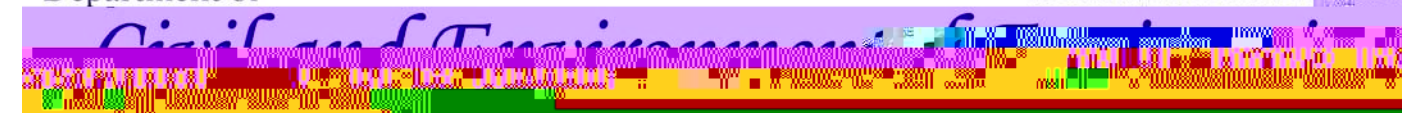




Department of

LOUISIANA STATE UNIVERSITY



Volume 7 • Spring Issue

March 2008

Name: \_\_\_\_\_ Year of Graduation: \_\_\_\_\_

Home Address: \_\_\_\_\_

Home Telephone: \_\_\_\_\_ Email: \_\_\_\_\_

Company: \_\_\_\_\_ Title: \_\_\_\_\_

Business Address: \_\_\_\_\_

Business Telephone: \_\_\_\_\_

News: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



Civil and Environmental Engineering  
Louisiana State University  
3418 Patrick Taylor Hall  
Baton Rouge, LA 70803-6405

Non-Profit Org  
U.S. Postage  
PAID  
Permit No. 733  
Baton Rouge,  
LA

ADDRESS SERVICE REQUESTED

### Message from the Chair

Welcome to another exciting issue of our newsletter. This is our first newsletter for 2008 and we anticipate it to be a very successful year for the department. As a Foundation of Excellence Program, we recognize that growth and productivity earned us this status but we must continue on the same course, always improving and maintaining our focus on avenues for growth.

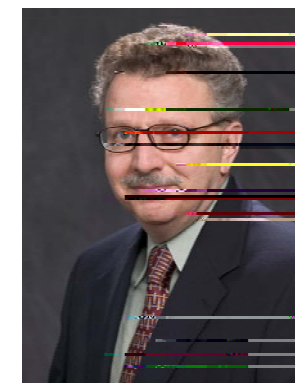
It is my pleasure to welcome four new CEE Hall of Distinction inductees: John "Jack" Donahue Jr. (1967 LSU CE graduate), J. Tinsely Oden (1959 LSU CE graduate), Ronald "Ron" Rodi (1978 LSU CE graduate), and Recep Yilmaz (1981 LSU CE graduate). The new inductees will be honored at our annual Hall of Distinction banquet, to be held this April. In honoring these individuals, we intend through them to recognize all those who contributed to Engineering excellence.

Also taking place in April will be the Deep South Conference, hosted by the LSU ASCE Chapter and LSU. This exciting event will be held April 3-5 on and around the LSU campus. We encourage all of you to get involved in this conference. Whether

as a volunteer, a sponsor, a participant or a spectator, the success of this conference will depend on the combined effort of the ASCE LSU Student Chapter and all of you.

Also, last spring, four Dutch students spent several days in our department cooperating with our students on a research project related to the river model. Details about are highlighted in this newsletter and the additional information can be found through the link provided in the article. We congratulate these fine students on their work.

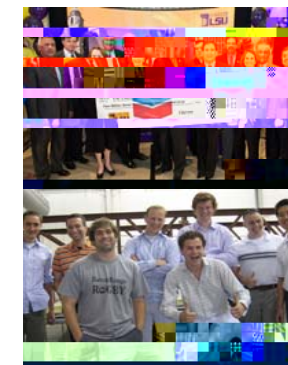
In closing, I want to bring your attention to the Student and Faculty Highlights sections. In each issue, we strive to recognize the accomplishments of our students and faculty on every level. Several of our students have received scholarships and awards and several of our faculty members have awards and grants. We congratulate all of them on their wonderful achievements and thank them for their contribution to our department's Foundation of Excellence status. Our department's success is due to the accomplished students and faculty who have been and will always be a part of CEE.



**Dr. George Z. Voyiadjis**  
*Boyd Professor, Chairman  
and Bingham C. Stewart  
Distinguished Professor*

### ISSUE HIGHLIGHTS

Deep South Conference	2
Student Highlights	3
VT Framed Resolution	3
River Model Research	4
Hall of Distinction	5
Faculty Highlights	9
Forever LSU Update	10
First AAM Conference	11



## YES, count me in!

I want to donate to the:  Fluid Mechanics Lab Project  
 Civil and Environmental Engineering Siess Endowment Fund

Here's my contribution of:  
 \$10,000  \$5,000  \$2,000  \$1,000  \$500  \$250  \$ \_\_\_\_\_

Payment:  Check enclosed — Please make check payable to:  
**LSU Foundation/Civil & Environmental Engineering**  
 Credit card (Circle one):  Visa  MasterCard  Discover  AmEx

Account number: \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/ \_/

Expires: \_/ \_/ - \_/ \_/ - \_/ \_/

Name as it appears on card: \_\_\_\_\_

Signature: \_\_\_\_\_

*Note: If your/your spouse's employer has a Corporate Gift Matching Program, you may be able to double or even quad-*



007 was a record-breaking year for fundraising for the Civil & Environmental Engineering (CEE) Department. With your help, we were able to increase the number of scholarships and fellowships available to our students. New professorships help us recruit and





ast spring, four students from TU Delft, Marten Hillen, Jos Kuilboer, Pieter Nordbeck and Roald Treffers, spent several days working alongside LSU CEE faculty and students at the Vincent A. Forte River and Coastal Engineering Laboratory. The TU Delft students were in Louisiana from early April through mid-June working on a research project as part of their Master's degree program in Hydraulic Engineering. Their very ambitious research project was to look at the long-term evolution of the birdfoot region and possible interventions that might slow or stop coastal erosion and provide some protection from hurricane events.

The DTU student's first two weeks in Louisiana were spent meeting with individuals from various state and federal agencies, universities and stakeholder groups. "A light bulb clicked about ten minutes into our initial meeting with them and I realized what a great experience it would be if they worked alongside my students on one of the river model experiments" recalls Clint Willson, an associate professor in the department. He adds, "They were excited to get a chance to do more than attend meetings, make calculations, and run computer simulations. It was a win-win situation for all".

The Vincent A. Forte River and Coastal Engineering Research Laboratory, dedicated in 2004, houses a small-scale physical model (SSPM) of the lower 80 miles of the Mississippi River. The SSPM, funded by the LA DNR, is a distorted scale model capable of providing semi-quantitative data and information regarding large-scale river flow and sediment diversions over long timescales. Experimental results from the SSPM are being used along with numerical model simulations to provide insights that can help guide diversion planning and design.

In late May, the DTU students drove up to Baton Rouge and, after a brief SSPM orientation, conducted a "30 year" simulation alongside two CEE graduate students. Dr. Willson says, "The students commented on how interesting it was to see the spreading of the sediment and how the sediment deposition correlat



**Recep Yilmaz (2007)** is a world-renowned expert in Cone Penetrometer Testing (CPT) and geotechnical drilling and is a Senior Vice President for Fugro Consultants, Inc., a 500+ employee geotechnics company and part of the Fugro Group of Companies. As Senior VP, Mr. Yilmaz leads the company's Louisiana, Houston Exploration, and Los Angeles operations.

Receiving his Masters of Science from Louisiana State University in 1981, Mr. Yilmaz's geotechnics passion and experience began during his studies here. He has performed extensive research for the development and applications of quasistatic and piezometric cone penetration in Louisiana. He also investigated the application of Cavity Expansion and the SHANSEP theory for cone penetration results. Mr. Yilmaz was responsible for the supervision of in-situ testing, correlation of field and laboratory results and the computer software development for North Louisiana Salt Dome investigations. His work also included research for the Division of Engineering Research, United States Department of Energy, and the Louisiana Department of Transportation and Development.

In 1981, Mr. Yilmaz began his career at Fugro Gulf, Inc. as a staff engineer and quickly progressed to Supervisory Engineer. His responsibilities included coordination of CPT field activities and interpretation of results

ions.0.7neilities inc4ulter.-0.2n .4(ties0.0006JlJlight)74(ns.y )Jncl0001 tjsut.



**J. Tinsley Oden (2007)** is Associate Vice President for Research and Director of the Institute for Computational Engineering and Sciences (ICES) at The University of Texas at Austin. He was the founding Director of that Institute, created in January of 2003 as an expansion of the Texas Institute for Computational and Applied Mathematics, also directed by Oden for over a decade. He holds the Cockrell Family Regents' Chair in Engineering and the Peter O'Donnell, Jr. Centennial Chair in Computer Systems at The University of Texas at Austin.

In 1959, Dr. Oden earned a B.S. degree in civil engineering from LSU. He then earned a Ph.D. in engineering mechanics from Oklahoma State University in 1962.

Dr. Oden began his research in computational mechanics and applied mechanics in the 1960's. His treatise, *Finite Elements of Nonlinear Continua* is cited as having not only demonstrated the great potential of computational methods for producing quantitative realizations of the most complex theories of physical behavior of materials and mechanical systems, but also established a new discipline built upon concepts in mathematics, computer sciences, physics, and mechanics. Computational Mechanics has since become a fundamentally important discipline throughout the world, taught in every major university, and the subject of continued research and intellectual activity. Dr. Oden has published extensively in this field and in related areas over the last three decades.

Dr. Oden is the author or editor of 500+ scientific books, book chapters, essays, articles, and conference papers, including 50 books and monographs. He is also an editor of the series, *Finite Elements in Flow Problems* and of *Computational Methods in Nonlinear Mechanics*. Among the 49 books and book chapters he has authored or edited a new discipline throughout the world, taught in every major university, and the subject of continued research and intellectual activity. Dr. Oden has published extensively in this field and in related areas over the last three decades.

Dr. Oden is the author or editor of 500+ scientific books, book chapters, essays, articles, and conference papers, including 50 books and monographs. He is also an editor of the series, *Finite Elements in Flow Problems* and of *Computational Methods in Nonlinear Mechanics*. Among the 49 books and book chapters he has authored or edited a new discipline throughout the world, taught in every major university, and the subject of continued research and intellectual activity. Dr. Oden has published extensively in this field and in related areas over the last three decades.

Among the 49 books and book chapters he has authored or edited a new discipline throughout the world, taught in every major university, and the subject of continued research and intellectual activity. Dr. Oden has published extensively in this field and in related areas over the last three decades.