



Alumni Newsletter Fall 2003

Department of Civil and Environmental Engineering
Southern Illinois University Carbondale

Welcome

Welcome to the first edition of the Alumni Newsletter from the Department of Civil and Environmental Engineering at Southern Illinois University Carbondale. During my recent exit interviews with graduating seniors, I heard overwhelming support for a newsletter that would allow alumni to stay in touch. Each issue will highlight faculty and student achievements, as well as professional and personal announcements from our alumni.

We are anticipating an increase in undergraduate enrollment this fall to more than 200 students. Our graduate enrollment is relatively steady at 30 students. We haven't added any new courses to the curriculum, but we have been working on improving senior design. This last year, CE 495 Senior Design students were divided into two groups and assigned the same project. Unlike in previous years however, the project was larger and more involved. In the end, students were able to compare final designs, estimated costs and management styles. This approach was quite successful, and will be used

again this year. In addition, we are developing modules on professional issues in collaboration with local engineers for CE 495a.

This year we will be initiating a graduate professional internship to compliment and enhance the academic program at the graduate level. Students involved in this program will have the opportunity to work with local engineering firms and governmental agencies while pursuing their advanced degrees. I'll keep you posted on the success of this program.

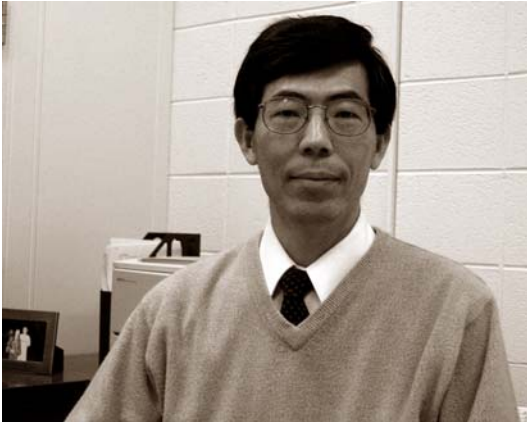
As you browse through this newsletter, I hope you enjoy reading about your alma mater. I encourage all alumni to send us updates as well as suggestions on how to improve this newsletter. I look forward to hearing from you.

Regards,

Lizette R. Chevalier, Chair

Changes

The first change you may have noticed is the addition of “Environmental” to the Department title. This reflects recent changes in the field of Civil Engineering as well as the course offerings and research of the Department.



New Faculty: Dr. J. Kent Hsiao

Two new assistant professors have joined the Department, Dr. J. Kent Hsiao and Dr. Shashi Marikunte. Dr. Hsiao earned his Ph.D. from the University of Utah in 2000. His research and teaching interests are in the areas of structural earthquake engineering, structural reliability, and structural design of buildings and bridges using steel, reinforced or prestressed concrete, masonry, and wood. Dr. Shashi Marikunte earned his Ph.D. from Michigan State University in 1992. His research and teaching interests are in the areas of structural analysis, reinforced/prestressed concrete and structural steel design, construction materials and fiber reinforced cement composites.

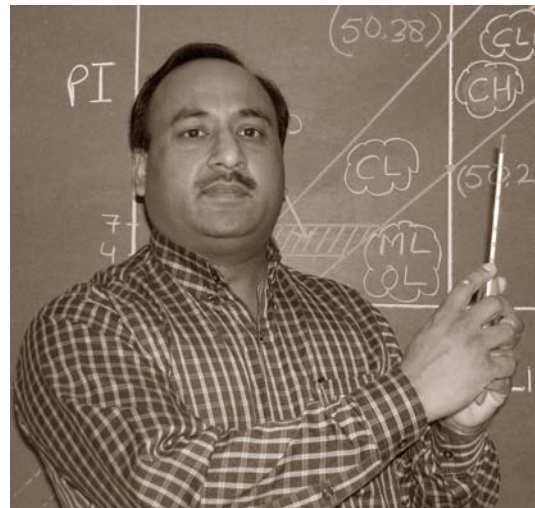


New Faculty: Dr. Shashi Marikunte

Scholarship and Research Highlights

Awards

The Faculty in our Department continue to excel in scholarship and research as evident by the awards received by Dr. Sanjeev Kumar and Dr. John Nicklow.



Outstanding Faculty: Dr. Sanjeev Kumar

- 2002 Outstanding Teacher for the Department of Civil Engineering
- 2002 Dean Thomas B. Jefferson College of Engineering Outstanding Teacher Award

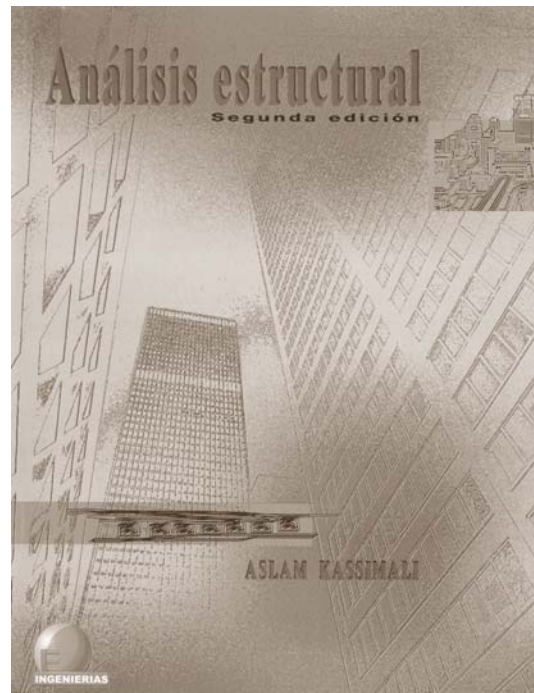
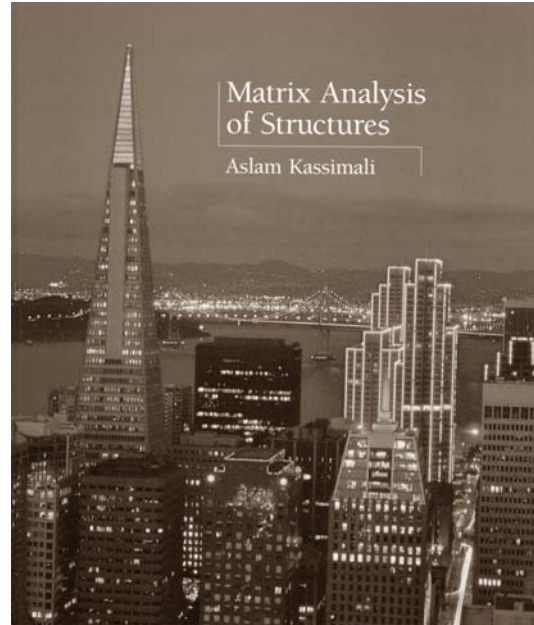


Outstanding Faculty: Dr. John Nicklow

- 2002 ASCE ExCEED New Faculty Excellence in Teaching Award, Zone III
- 2001 Dean Thomas B. Jefferson College of Engineering Outstanding Teacher Award
- 2001 Dean Juh Wah Chen College of Engineering Outstanding Faculty Research Paper Award
- 2001 Dean Kenneth E. Tempelmeyer College of Engineering Outstanding Faculty Research Award

Textbooks

Dr. Aslam Kassimali's textbook "Structural Analysis" published by Brooks/Cole Thomson Learning is now in its a second edition as well having been translated into Spanish and Korean. To date, this text has been used in 47 different colleges and universities. His text "Matrix Analysis of Structures", also published by Brooks/Cole, has been adopted for use by 26 different colleges and universities. In addition, Dr. Kassimali co-authored the texts "Engineering Mechanics: Statics" and "Engineering Mechanics: Dynamics" with Dr. Braja M. Das and Dr. Sedat Sami. These textbooks were published by Richard D. Irwin, Inc. in 1994.



Textbooks by Dr. Aslam Kassimali

Web Based Projects

A current educational project supported in part by the National Science Foundation Division of Undergraduate Education is *Digital Images of Environmental and Water Resources Engineering*. The project is

designed to support the integration of technology into engineering courses and further facilitate student learning, understanding and recognition of classroom concepts. The website and CD-ROM will contain a database of photographs and video clips that illustrate concepts such as open channel flow, sedimentation, and unit processes in water and wastewater systems. This database is being constructed by filming an array of existing engineering operations, facility renovations, and construction projects, as well as naturally occurring phenomena. The project's principal investigators are Dr. Lizette Chevalier, Dr. John Nicklow and Dr. Bill T. Ray from Civil Engineering and Lilly Boruszkowski from Cinema and Photography. The site is under development, but you are welcome to review it at:

http://civil.engr.siu.edu/NSF_DI



This is the second major educational research project awarded to faculty in Civil Engineering by the National Science Foundation in recent years. The first project, *Interactive*

Multimedia Labware for Civil Engineering Curricula, developed web-based laboratory manuals for both the environmental and strength of materials laboratories. The principal investigators were Dr. James Craddock and Dr. Lizette Chevalier. You can visit this site at:

<http://civil.engr.siu.edu/nsflab/>

Welcome to Civil & Environmental Engr. Laboratories



Student Activities Highlights

The SIUC Student Chapter of the American Society of Civil Engineers (ASCE) annually competes in a regional steel bridge competition. The purpose of the competition is to design a steel bridge from a very specific set of rules, fabricate it, and build it during timed construction. In 2001, the team finished 2nd at the regional competition. In a breakthrough performance, the 2002 team not only won in the regional competition, but went on to be the 7th team overall in the nation, competing with 280 other teams. In 2003, the performance was repeated by taking 1st place in the regional competition and 9th at National.

In addition, the ASCE student organization sponsored a concrete canoe team while the student chapter of the Illinois Professional Land Surveyors Association sponsored a surveying team at the competitions.

ASCE Bridge and Canoe Teams for 2003



Students involved in the winning bridge team for 2003 were Steve Little, Matt Coupar, Tom Winner, Matt Santeford, Ryan Phelps, Tim Davis, Tim Hedger, Sotirios Kirkikis, Jeff Cochran, Nick Smith, and Todd Smith .



Students involved in the 2003 concrete canoe team were Stacey Milner, Matt Santeford, Steve Little, Joe Vandre, Jeff Cochran, Mark Radake, Felicia Basolo, and Nicole Darling.

Professor Bill Eichfeld is the advisor for ASCE. The new officers are:

President: Ryan Phelps
Vice President: Stacey Milner
Treasurer: Tim Hedger

Recording Secretary Donna Kaufman
Corresponding Secretary: Sotirios Kirkikis
ESC Representative: Matt Coupar

Professor Roy Frank is the advisor for IPLSA. The new officers are:

President: Kevin Krohe
Vice-President: Tim Davis
Secretary: Jake Hammond
Treasurer: Mike Mordini

Professor Bruce DeVantier is the faculty advisor for Tau Beta Pi. Professor Rolando Bravo is the advisor for Society of Hispanic Engineers, SHPE. Professor John Nicklow is the co-advisor for the Engineering Student Council. Professor Eichfeld and Professor Lizette Chevalier are the co-advisors for the Society of Women Engineers, SWE.

Congratulations to our Graduates

The following students graduated from the SIUC Department of Civil and Environmental Engineering in Fall 2002, Spring 2003, and Summer 2003.

Bachelor of Science Degree

Adrian Adams
Karen Armour
Kevin Bird
Kevin Cochran
Timothy Davis
Devon DeJournett
Brooke Doerr
Anita Easton
Lucas Grote
Michael Hansen
Jesse Kocher
Giezi Licardie
Steven Little
Nicholas Mathey
Michael Menckowski
Tanner Meyer
Lisa Miller
Chad Mowery
Allison Newsom
Laura Pearce
Jeffrey Ramlow
Thomas Rankin
Steven Restoff
Bernard Schmitt
William Schultz
Anfal Shehabi
Vincent Simek

Scott Simmons
Jason Smith
Nicholas Smith
Thomas Stangle
Andy Stone
Su Wei Tang
Kirby Woods, Jr.

Alumni News

For the first edition of the alumni newsletter, a number of our alumni have sent information on their present employment. In future editions, we hope that many more of you will contact us with your updates, including promotions, changes in employment and even personal news that you would like to share with fellow alums!

Isaac Fuhr, BS 01
McCain and Associates, Inc.
Excelsior, MN
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Isaac Fuhr (BS 01) with his family.

Jessica Andrews, BS 01
Graduate Engineer II
Turner Collie & Braden Inc.
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Sandor Williams, BS
Project Engineer/Marketing
Representative
Infrastructure Engineering Inc.
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Currently enrolled in the MBA program
at Roosevelt University

Stephanie Crawley, FE, BS 01
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John Swartz, BS 02
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Denver, CO
siuparrothead@yahoo.com



John Swartz, BS 02

Faculty

Rolando Bravo, Assoc. Prof.; Ph.D., Univ. of Houston, 1990; Certified Professional Hydrologist (Amer. Inst. of Hydrology), P.E., hydraulics & hydraulic design, hydrology, groundwater flow and subsidence.

Lizette R. Chevalier, Chair and Assoc. Prof.; Ph.D., Michigan State Univ., 1994; E.I.T., environmental engineering, environmental hydraulics, contaminant hydrology, NAPL transport/remediation and numerical analysis.

James N. Craddock, Assoc. Prof.; Ph.D., Univ. of Illinois, 1979; P.E., finite-element stress analysis, mechanics of composite materials, solid mechanics, numerical analysis.

Bruce DeVantier, Assoc. Prof.; Ph.D., Univ. of Calif. @ Davis, 1983; P.E., soil remediation, drinking water quality, numerical modeling, finite-elements.

William F. Eichfeld, Assist. Prof.; M.S., Univ. of Wisconsin, 1973; P.E., structural analysis, strength of materials, highways and highway construction materials.

Roy R. Frank Jr., Assist. Prof.; M.S., Southern Illinois Univ. Carbondale, 1983; IPLSA, surveying, photogrammetry, GIS, GPS, heavy construction.

J. Kent Hsiao, Assist. Prof.; Ph.D., Univ. of Utah, 2000; S.E.(UT), C.E.(CA), structural earthquake engineering, structural reliability, structural design of buildings and bridges using steel, reinforced or prestressed concrete, masonry, and wood.

Aslam Kassimali, Prof.; Ph.D., Univ. of Missouri @ Columbia, 1976; nonlinear structural analysis, structural dynamics and stability, and analysis of fiber-composite structures.

Sanjeev Kumar, Assoc. Prof., Ph.D. Univ. of Missouri @ Rolla, 1996; P.E., dynamic soil-structure interaction, piles under lateral loads, settlement prediction of landfills, seismic analysis and design of landfills, ground motion amplification in soils, liquefaction of silts and sands, and machine foundations.

Shashi S. Marikunte, Assist. Prof.; Ph.D. Michigan State University, 1992, Structural Analysis, Reinforced/Prestressed Concrete and Structural Steel Design, Construction Materials, Fiber Reinforced Cement Composites.

John W. Nicklow, Assoc. Prof., Ph.D. Arizona State University, 1998; P.E., P.H., water resources and hydraulic engineering, application of operations research techniques to water resources and environmental systems, sediment transport, applied hydrology.

Vijay K. Puri, Assoc. Prof.; Ph.D., Univ. of Missouri @ Rolla, 1984; geotechnical engineering soil dynamics, machine foundations, liquefaction of soils.

Bill T. Ray, Assoc. Prof.; Ph.D., Univ. of Missouri at Rolla, 1984; P.E., wastewater residuals management; rock filters for lagoon solids removal; lead in drinking water; nitrification in activated sludge processes; hazardous-materials handling and disposal.

Shing-Chung Yen, Prof. and Director of Materials Technology Center; Ph.D., Virginia Tech, 1984; analysis of composite materials and structures, solid mechanics, structural dynamics and vibrations.

James W. Blackburn, Assoc. Prof.; Ph.D., Univ. of Tennessee, Knoxville, 1988. Joint appointment with the Department of Mechanical Engineering and Energy Processes.

Publications 2002

Chevalier, L.R., Irwin, C.N. and Craddock, J.N., (2002) "Evaluation of InSpectra UV Analyzer for Measuring Conventional Water and Wastewater Parameters". *Advances in Environmental Research*, 6(3):369-375.

Craddock, J.N., and Chevalier, L.R., (2002) "Development and Preliminary Formative Assessment of Web-based Multimedia Labware for an Environmental Engineering Laboratory", *International Journal of Engineering Education*, 18 (6).

Kumar, S. and Yong, L. (2002) "Effect of Bentonite on Compacted Clay Landfill Barriers", *Soil and Sediment Contamination: an International Journal*, Vol. 11(1), 71 -89.

Muleta, M.K. and Nicklow, J.W. (2002) "Evolutionary Algorithms for Multiobjective Evaluation of Watershed Management Decisions", *J. Hydroinformatics*, IWA, 4(2): 83-97.

Richardson, J.P. and Nicklow, J.W. (2002) "In Situ Permeable Reactive Barriers for Groundwater Contamination", *Soil and Sediment Contamination*, AEHS, 11(2): 241-268.

Externally Sponsored Research Projects 2002

Chevalier, L.R., Ray, B.T., Nicklow, J.W. and Boruszkowski, L. (2002) "Digital Images of Environmental and Water Resources Engineering Principles and Practice", National Science Foundation. \$140,000.

Kumar, S., (2002) "Durability Evaluation of Illinois Bottom Ash Concrete Composites", ICCI/DCCA. \$20,791.

Kumar, S., (2002) "Seismic Foundation Spring Coefficients and Slope Stability of Solidified Sludge", Arun Wagh Inc., \$6,650.

Panashai, N., Cross, B. and Kumar, S., (2002) "Evaluation of Comprehensive Seismic Design of Bridges (LRFD) in Illinois", Illinois Transportation Research Center. \$150,000.

Sevim, H., Earnest, A., Pericak, K., Bravo, R., (2002) "Reaching Out to Academically Talented, Financially Disadvantaged Students for Careers in Engineering and Mathematics". National Science Foundation, \$399,994.

Recent Dissertations, Thesis and Research Papers

Alarcon, Cesar (2002) Performance of Concrete Composites Made With Illinois PCC Dry Bottom Ash in Pre-Cast Concrete Piles.

Cherry, Monte (2002) Ultraviolet Disinfection for Wastewater Treatment Facilities.

Hall, Michael L. (2002) Parametric Study of Site Instability Due to the Presence of a Weakening Shale Layer Above Sloping Bedrock.

Heacock, Daniel L. (2002) Biofilters for Odor Control for Livestock Facilities.

Irwin, Craig (2002) Evaluation of Inspectra UV Analyzer for Measuring the Conventional Water Parameter TOC.

Leahy, Thomas Phillip (2002) Stability and Large Deformation Analysis of Arches Using StraightBeam Column Analysis.

Liebman, Christian J. (2002) The Effect of Aerobic Thermophilic Treatment on Phosphorous Concentrations in Hog Waste.

Muleta, Misgana Kebede (2003) A Decision Support System for the Management of Non-Point Source Pollution from Watersheds.

Munie, Joyce (2002) The Use of Bioreactor Technology in Municipal Solid Waste Landfills.

Poorman, Troy D. (2002) Prevention of Significant Deterioration Review and Permitting.

Rolla, Michael (2002) Structures of District Nine.

Stewart, James (2002) Geotechnical Engineering Characteristics of Illinois PCC Dry Bottom Ash Amended with Bentonite

Wigell, Gary (2002) Mechanical Behavior of Open Section Composite Beams.

Contact Us!

We encourage our alumni to stay in touch! Let us know where you are employed, your title, where you live, any promotions, your email, and any family information you may want to share with everyone. Send your updates to:

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David A. Webber, Zone Engineer
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